



Handbook for Teachers

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Handbook for Teachers is based on a compilation of excerpts from a variety of excellent sources around the country. Many individuals and universities have generously shared their work with us. The handbook is intended to be an introduction to available literature on teaching as well as a resource in its own right for the teaching community.

We hope that our readers, both faculty and graduate students, will provide us with feedback about the handbook, indicating the places where additional or different information may be helpful. An evaluation form has been included at the end of the handbook which we would appreciate receiving from all handbook users. We will incorporate these suggestions into future editions of the handbook with the goal of creating a resource which adequately addresses the realities and concerns of instructors in a variety of settings.

Adaptations are credited in the text according to the following system. When "Adapted from ..." appears just after the title of a section, it indicates that the section was adapted from that source. When "(adapted from...)" appears within the text of a section, it indicates that the preceding paragraph was adapted from that source. We would like to acknowledge the following individuals and institutions who have granted permission for the inclusion of materials in *Handbook for Teachers*.

The ultimate test of your classroom abilities may well be not how much you have taught, but how much you have learned and the degree to which your students have learned to learn.

C. Roland Christensen in *The Art and Craft of Teaching*

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PART ONE: STRATEGIES FOR TEACHING

PREPARATION

Adapted with permission from Farris, 1985

The process you engage in preparing for classes will depend both upon the expectations of your department and the type of class for which you are responsible. Preparation involves establishing what it is you want students to learn (instructional objectives), choosing instructional strategies (lecture, discussion, lab, individual presentations, group projects, etc. or a combination), and selecting the appropriate materials (texts, handouts, films, videotapes, etc.) to achieve those aims.

Establishing Instructional Objectives

Your first step in organizing a course (or single lecture, discussion or lab) should be to establish the level of performance you expect from your students. This may necessitate your administering a diagnostic test or assessing an in-class essay in order to determine what students already know and what they need to learn.

After assessment, your next step is to choose the means of instruction that will enable students to perform at the level you expect. If you need to cover 50 years of research in ten weeks, you will probably lecture. If students must be capable of applying course material, you will not only have to present factual material through texts and lectures but also show them how to develop generalizations from the background knowledge (discussion, study problems, assignments), and provide them with opportunities to apply newly learned principles in novel situations (laboratory experiments, papers, examinations). (Adapted with permission: Farris, 1985)

Bloom (1956) has proposed a taxonomy of six educational objectives which move from lesser to greater levels of abstraction and complexity in the thinking processes required of students. Instruction can be organized around one or more of these hierarchically arranged objectives: knowledge, comprehension, application, analysis, synthesis and evaluation. Particular teaching styles tend to lend themselves to the accomplishment of certain objectives rather than others. For example, lectures facilitate learning at the lower end of the taxonomy --

knowledge, comprehension, and application, while discussions or other more interactive teaching styles tend to facilitate higher order objectives -- analysis, synthesis, and evaluation. Under ideal circumstances your choice of teaching style should reflect the level of thinking and learning in which you want students to be engaged.

Selecting Instructional Strategies

Adapted with permission from Farris, 1985

Once you have decided upon your objectives for a particular course, lecture or section, it is then necessary to choose instructional strategies which are appropriate to them. Matching instructional strategies to general objectives is an important part of the planning stage. To help match teaching strategies to your objectives, you might ask yourself some of the following questions: (Adapted with permission: Ronkowski, 1986)

- When should I lecture and when should I hold a discussion?
- When should I be showing students how to do something and when should I encourage them to try it themselves?
- When should I respond to a student question (give information) and when should I encourage other students to respond (give opportunity for students to practice skills)?
- If I see someone make a mistake in lab, when should I correct the mistake and when should I let the student discover it?
- When should I review important concepts orally and when should I use handouts?
- If I need to show students a lot of formulas or graphs, should I derive or draw them during class or prepare handouts | overhead transparencies and discuss them myself?
- When should I rely on my own expertise, and when should I seek outside sources (films, slide | tape programs, guest speakers, etc.)?

By considering such questions, you can begin to formulate strategies | techniques which match the general objectives you have set for students.

In summary, the planning stage of instruction consists of a series of choices:

- choosing the objectives you expect students to attain;
- choosing an appropriate sequence for these slated objectives in your instruction; and
- choosing the materials and instructional strategies to accomplish the goals you, set for your class.

The Syllabus

Adapted with permission from Northeastern University, 1987

The first day of class can be an anxious experience for your students. Students enter the first day of class with at least four questions (Ericksen: 1984): (1) Is the class going to meet my needs?; (2) Is the teacher competent?; (3) Is the teacher fair?; and (4) Will the teacher care about me? To this list we would add: What does the teacher expect from me? What will I need to do to get a good grade? How will I juggle the workload for this course with the workload in my other courses?

While what you do on the first day of class will address many of these questions, your course syllabus can also do much to calm student anxiety. The syllabus addresses the question of whether the class will meet student needs by presenting an overview of its scope and coverage. The issue of competence is less obviously handled by your syllabus; however, the students will make judgments about you based on such syllabus factors as course structure and organization, how well learning activities (e.g. assignments, exams) are tied to course goals, and how clearly you have delineated your goals, policies, and expectations. The issue of fairness is covered by your statements of policies and expectations. Whether or not you care about your students will come across mostly in face-to-face interactions; but your students will also make judgements on how much you care about them based on syllabus contents. What you expect of your students and what the student needs to do to get a good grade are covered by your statements of goals, policies, and expectations. Finally, the student's concern about workload will be addressed by your statements of schedules, assignments, and exams.

The ideal syllabus should serve as a basic reference document for both you and your students, and as such should include:

- General logistical information: your name (and that of teaching assistants if appropriate), office address, office phone, office hours, course name | number, course meeting time | place, and course text(s)
- Policy statements, such as: grading, lateness | missed work, attendance, and make-up exams
- Statements of course requirements, such as: papers | assignments, discussion sections, lab sections, exams, and fieldwork
- Course calendars: course schedule / topic outline, assignment/lab/exam schedule, etc.

Class Rolls

You will receive a class roster at the beginning of the quarter. A revised roster will arrive later in the quarter which reflects the class size once students have dropped and added the course. You may want to make a photocopy of the roster for your teaching assistants if they will be keeping attendance records in their sections or labs, or recording grades throughout the quarter. It is always advisable to have at least one duplicate copy of your recorded grades in the event that your roster is misplaced.

The use of computer generated spreadsheets may also be an efficient way of keeping track of student grades, attendance patterns and general background information (telephone, address, class schedule, etc.). Many computer software packages are now available that will run programs which calculate final course grades, thus saving you considerable time and energy.

Classrooms

Adapted with permission from University of Tennessee, 1986

Before your first class meeting, it is wise to check the room where you will be teaching. Occasionally a clerical error occurs, causing a class to be scheduled in a broom closet or a nonexistent room number. If this happens, when you get another room, post a sign near where the assigned room would have been, directing students to the new location. Some difficulties can also arise regarding the amount of chalkboard space, number of seats, or physical condition of the classroom. If there is a problem, the room can be changed. Follow your department's policy for obtaining a room change. Your department secretary may also be helpful if you need to change your class size or classroom. Also, if you intend to use audio-visual equipment in your sections it is wise to schedule a room which is accessible.

Once settled, take a look at the way the room is organized. Seating is a prime consideration, and it can do a great deal to either facilitate or hinder what goes on in your classroom. The traditional rule of thumb is to make sure that students are clearly within the instructor's range of vision.

Remember that you may be able to manipulate seating to foster any number of effects from closeness to conflict. There are any number of ways to arrange seating. You'll want to experiment and solicit suggestions from students. For example, if you want to encourage discussion, place desks or chairs in a circle or horseshoe. This arrangement facilitates the give-and-take of conversation inasmuch as students can see one another when they talk. Students are also much more likely to get to know one another in a face-to-face seating arrangement and are more apt to stay attentive throughout the hour, as it is more difficult to withdraw or 'space out' from a circle without being noticed. If you plan to lecture, arrange the furniture so that all students can easily see you without straining. Ask your students to comment upon present arrangements and on what would be useful for them.

Good environments are frequently flexible ones. Feel free to have students move their chairs several times during a class. For example, you might have them move into a circle for discussion, into a small group for in-depth exploration of a topic, and back to rows for your lecture. Experiment with different room arrangements to find those which work best for you. (Adapted with permission: Ronkowski, 1986)

PART ONE: STRATEGIES FOR TEACHING (Continued)

IMPLEMENTATION

Choosing an Instructional Style

Having established goals and objectives and chosen appropriate instructional materials, you now have the opportunity to implement these plans in a variety of ways. It is important to remember that "the instructional strategies and techniques that you adopt as a teacher bespeak your attitudes about yourself and your students and your respective roles in the teaching process." (Crow, M.L., 1980)

Differences in teaching styles, and their implications, are described in a number of ways by different authors. One model proposes three potential foci in teaching which include: (Axelrod, J., 1980)

- **SUBJECT MATTER-CENTERED TEACHING** in which teaching is organized around the goal of helping students master principles, concepts, analytic tools, theories, facts, etc. in a particular discipline.
- **PROFESSOR-CENTERED TEACHING** which is organized around the goal of helping students learn to approach problems in the field as professors approach them ... concentrating on transmitting segments of knowledge that are considered 'standard' in the field.
- **STUDENT-CENTERED TEACHING** which emphasizes the personal development of the whole student, organizing class sessions around the desire to help students develop as individuals along all dimensions. The aim is to improve not only the students' analytic skills but also their ability to use their intuitive, non-verbal powers.

These categories are not, of course, mutually exclusive. Throughout the duration of the quarter you might use elements of one or another approach depending on what you want your class or section to accomplish. The approach you adopt will most likely reflect your assumptions about the fundamental nature of student-teacher relationships.

Another approach to the discussion of teaching styles focuses on the amount of interaction between students and teachers which is built into the classroom situation. A significant body of educational research has concluded that the more active involvement students have in the learning process (through discussions, question and answer sessions, group projects, presentations, etc.), the more information they retain and the more enjoyable they find their experience. (Crow, M.L. 1980)

Utilizing an interactive teaching style may result in the following benefits for students: (Crow, M.L. 1980)

- students become active rather than passive participants in the learning process
- students retain information longer
- interactive techniques are democratic processes and thereby give students experience in collaborating and cooperating with others
- problem-solving and critical thinking skills are enhanced in discussion settings
- some students may learn better in a group situation
- self-esteem is enhanced by class participation
- students are given the opportunity to clarify their beliefs and values
- student motivation for future learning is increased

In general, there is considerable evidence to indicate that teaching techniques which maximize interaction between students and teachers, and among students themselves, tend to emphasize cognitive tasks at the higher levels of Bloom's taxonomy of educational objectives. So, in choosing an instructional style for your course, it is helpful to keep in mind what it is you feel is most important for your students to be learning. The means through which your objectives are carried out may either facilitate or hinder what you are trying to accomplish with students.

Special Considerations for Teachers of Freshman Students

Adapted with permission from Northeastern University, 1988

There are some special characteristics of freshmen students that set them apart from other students and of which teachers of freshmen should keep in mind:

- Entering freshmen have been socialized for twelve years into a system of primary and secondary education within which
- they performed according to a set schedule of daily, often collected assignments
- many students moved together from class to class and from term to term, forming a continuing and strong support network

- weighted grading systems differentially reward performance in courses by level of difficulty
- where all of the institution's resources (including the teacher) were right there everyday in the classroom.

As a result, the expectations of university academic life, emphasizing self-initiation, independence, and responsibility may be quite jarring for first year students.

Most often, college is the first extended experience freshmen have had with independent living. For many, it is also their first extended urban experience. The transition from family, town, and school, to the newness of independence and the wonders of city life, can all too easily overshadow what may be perceived by the student as dull academic responsibilities.

The very size and complexity of the University can be tremendously confusing and intimidating to students whose entering class is often larger than the population of the entire high school from which they came; whose classmates and even roommates are strangers to them; whose training to be mostly passive receivers of educational services makes them unused to seeking out assistance, especially in an alien environment.

For the most part, entering freshmen are used to being in the upper halves of their graduating classes, to being widely known and respected by their peers and teachers -- in other words, to being "big fish in small ponds." At the university, many of them are anonymous, submerged in large classes, and competing with the cream of number of high schools -- a very "small fish" in an awfully "big pond". This is often a difficult transition.

Unlike upperclass students, whose pre-requisites assure some consistent entry levels into courses, the variety of learning styles and the level of preparation of freshman students varies as widely as do their study skills. Students are often shocked to discover what is expected of them as freshmen. The material below on "Building a Supportive Classroom Environment" may provide some suggestions for minimizing the difficulties faced by freshmen students in your classes.

First Class Survival Tips

Adapted with permission from Unruh, 1986

The first class sets the quarter in motion. So it is wise to consider carefully what you want to do in that first meeting. The following is an agenda which may help you structure the meeting and allay some of your anxiety.

- **If you want to achieve an informal style, arrive early and begin to know your students.** This will help you relax and help your students get to know that you are a student yourself. If you prefer a more formal style, wait until the appointed hour and then enter the classroom. Allow a little extra time for "lost" students
- **Once you begin speaking, try to speak slowly and repeat whenever you feel panicky.** Remember to slow down the rate of speech and focus your attention on what you want to get across instead of how you are saying it or how you appear.
- **Begin by introducing yourself and write your name on the board.** You might go around the room and ask for names, departments, city of origin, and the like. Remember, they are at least as nervous as you are. Locate each name on the roster and make a point of learning their names.
- **Let your students know that you are organized.** Give them a handout which might include: your name, office hours, times and locations of other class meetings, the required text and readings, the number and dates of examinations, information about lab or homework assignments, guidelines for term papers or class projects, a breakdown of how the course grades will be determined, the time and date of the final exam, whether class notes are available, and other information of interest.
- **Prepare for predictable enrollment problems and procedures.** If there is a waiting list, give your students an idea of their chances of getting into the course.
- **Briefly sketch the kind of material presented in your class and the kinds of activities required** of them throughout the quarter. Explain why you as an instructor are excited by

the course material. Such feelings can be contagious.

- **Be enthusiastic!** Enthusiasm comes with confidence, excitement about the subject, and pleasure in teaching. Enthusiastic behavior includes facial expressions and smiles, attentiveness to students, movement away from the podium or chalkboard, and eye contact which is long enough to observe students' expressions. It involves vocal inflections to emphasize and de-emphasize material, and a willingness to listen to students and express interest in their contributions. Student can spot an unenthusiastic instructor very quickly, and may assume that, if the subject matter is not of interest to you the instructor, then it is probably of no interest to them either. (Adapted with permission: University of Nevada)
- Finally, ask if there are any questions regarding the course, its requirements, or your role within it. Be sure to pause long enough for them to reflect and formulate questions.

Skills of a Good Teacher

Adapted with permission from University of Illinois, 1980

N. L. Gage, Director of Research and Development in Teaching at Stanford University, has formulated six characteristics of effective college teaching which may be of interest.

Gage (1976) found that "effective" presentations of college instructors include:

- Stating objectives at the beginning of a lesson.
- Outlining the lesson content.
- Signaling transitions between parts of a lesson.
- Indicating important points in a lesson.
- Summarizing the parts of the lesson as the lesson proceeds.
- Reviewing main ideas and facts covered in a lesson: at the end of a lesson and at the beginning of the next lesson.

You should be rather satisfied with your initial teaching experience if you can successfully integrate Gage's six characteristics into your teaching approach. A note of caution must be added, however: be aware that not all lessons proceed as planned, allow some class time for reviewing and previewing of material and various unexpected happenings; in other words, be organized and allow for some flexibility in your planning. Instructional skill, as does any valuable talent, takes time to develop. Work on one, or at the most, two skills each week. Try not to be discouraged if at first you do not "knock `em off their feet." Teaching is not an easy task.

Building a Supportive Classroom Environment

Adapted with permission from Unruh, 1986

A most important ingredient of teaching is your classroom style. What should the teacher-student relationship be? Our suggestion is that you be natural and honest. The teacher-student relationship is basically another human relationship. Others involve role-playing in which we act according to some set of social standards which seem appropriate for the situation. You are more likely to be a successful teacher if you accept the facts of the situation: you have more experience and knowledge than the students, you are being paid to help them learn, you have chosen to adopt either a formal or informal style, and they are in class for various reasons (which you should try to be aware of). Base your actions on the situation at hand rather than on some extraneous concept of what a teacher is or on the expectations of the class. The following suggestions may be helpful in establishing the kind of classroom environment which will facilitate students' learning and make your experience as a teacher more comfortable as well. (Ames, N.R. and Archer, P.F., 1980)

Learn Student Names

This may seem like a simple suggestion, but it has profound results. All of us respond to being approached individually and personally, and the logical way of beginning that process is calling us by our names. The immediate problem is how to learn the names of 100 or more students each

quarter. One way of approaching the problem is telling the students on the first day that they may sit anywhere they choose but that you would like them to sit in the same place for a week or two so that you can learn their names. In smaller classes you can have them introduce themselves and provide some biographical information which may aid you in recalling their names later on.

Biographical information on students can also be gathered by asking them to fill out index cards or to complete a short survey at the beginning of the quarter. This information can be valuable in helping you to assess "where your students are" in terms of their academic backgrounds, and may also alert you to opportunities where course material can be made more meaningful by integrating it into students' personal experiences.

Provide Non-verbal Encouragement

Provide a secure, reassuring, positive atmosphere. There are several ways of encouraging such an environment that do not involve the spoken word. Maintain eye contact with students. Move around the room. It is important that you be animated and expressive in your presentation. Control nervous mannerisms. Fiddling with a tie or with a lock of hair indicates to students that you are not self-confident. This can be particularly unnerving to students. Students react positively to teachers who seem to be firmly in control of the situation.

Avoid Judging Students

Without realizing it, teachers can exhibit judgmental behaviors that discourage students by making them feel even more inadequate than they already may feel. A behavior to avoid is judging students on the basis of appearance or dress. We must not allow ourselves to be turned off by a student who is unkempt or who is wearing nontraditional clothing. Another behavior to avoid is sexual stereotyping: we may unconsciously assume that females have a certain set of interests and males have another. Age stereotyping is another judgment trap. We may expect certain behaviors from people in certain age groups; for example, we may assume that older students are automatically more self-assured or serious about their work than are eighteen-year-olds.

As much as we may believe that we are not prejudiced, racial or ethnic considerations can cause us to react subconsciously in ways that students find disturbing. For example, do you expect different attendance patterns from certain groups of students? Do you find yourself avoiding certain subjects in the classroom because of the fear of offending somebody? Do you tend to target your examples toward certain groups in your class? Do you assume that students have certain expertise based on racial or ethnic characteristics? Becoming aware of this type of judgmental behavior can help us avoid it.

Learn Something Personal About Each Student

This sounds simple, but it requires some effort and energy on the part of the teacher. This strategy is an extension of the suggestion to learn your students' names; it is one step further in the process of personalizing relationships. Learning how many children a student has, what his or her personal interests and hobbies are, or what kinds of books he or she likes to read can help you establish fairly quickly a warm relationship with that student. Teachers of composition courses might have an advantage here because students often reveal personal areas of their lives in writing; but whatever your discipline, you need to find ways of bringing out students' personal interests.

Relate to Students on a Personal Level

This is the complementary side of learning something personal about each student. It is important for you to be willing to share parts of yourself and of your personal life with your students if you expect them to share with you. There are a number of easy ways of accomplishing this. In classroom presentation you can speak occasionally from personal experience. This will encourage students to respond to you not only as an authority figure but as a person. However, use discretion with this technique; no one wants to spend an entire quarter listening to an instructor telling his or her life story.

Provide Specific Positive Reinforcement

Taking the time to compliment a student on some specific thing that he or she has done well can have tremendous payoffs for a teacher. The key here is specificity. Students will sense a lack of genuineness if you compliment profusely and generally, but if you can pick out one particular element of their work or one particular aspect of their attitude that you like, your comment will have much more meaning. A student who has written a paper that is not particularly effective but who has used a striking metaphor, for example, can be complimented on that use. You may compliment a student on the perceptiveness of a question; if you indicate that you remember him or her asking several other perceptive questions, your compliment will be more impressive. One word of caution here is that you need to be alert and sensitive as to how your students are receiving the words. Some students feel uncomfortable about receiving compliments at all and will become even more uncomfortable if the compliments continue. An understanding of basic body language and facial expressions is helpful in this instance.

Treat Your Students as Adults

Sometimes teachers unwittingly put down their students by treating them as children, by overlooking them, or by exhibiting impersonal kinds of behavior. One example that you've probably seen is a teacher turning away from a student to address a colleague who is walking by. If you do not excuse yourself to the student or introduce him or her to the colleague, you are treating him or her as a less than responsible adult. Perhaps the most effective approach is introducing your student to the colleague and then asking the student if he or she minds if you talk with the colleague; you may be able to include the student, at least for a short time.

Another way of making your students feel important is spending time with them. This could be in the cafeteria or in your office. Before and after class you can chat informally with groups. When you meet a student in the hall or on the campus, smiling and giving a personal greeting is very effective. Call the student by name; it makes a great deal of difference.

Make Yourself Available

Any teacher who is responsible for teaching five sections of English composition or for teaching three lab courses will recognize that this is often a difficult thing to do. However, it is essential, particularly with students who may be having difficulty. You are serving as a role model to these students, and keeping reliable office hours gives them a sense of your commitment. If you set office hours, be sure to keep them. Be on time. Spend as much time in the office as you have promised; if for any reason you won't be able to be in your office on a given day, give your students advance notice. You have, in essence, made a contract with them and you should keep it.

Also, be in class for all of your allotted time. Perpetual tardiness can give students the idea that promptness is not something you care about.

Never Humiliate a Student

Although you don't intend to humiliate students, you may inadvertently interact with them in ways that are embarrassing or that make them uncomfortable. Even if such embarrassment is subtle, it can discourage a student and make it difficult for him or her to come back to your class. Avoid sarcasm with students, as well as teasing that is destructive in nature. Determining what might be dangerous is sometimes difficult and requires a good bit of perception on the part of the teacher. A young woman, for instance, who has been sheltered may be embarrassed very easily even by a compliment. A general rule of thumb is to respond to students in the same way they deal with you. If the students tease you, you can feel reasonably assured about responding in the same way.

Be As Positive As Possible

This is not easy when you are having a hard day, but there are some techniques that will make

you and your students feel positive. Voice quality, for instance, is extremely important. Be energetic and bright in your inflection. A monotone or a deep, tired voice will give away your lack of interest. Be willing to laugh in class, and encourage your students to laugh as well. If at all possible, be available before class for small talk, chatting, greeting students. Sometimes this will be therapeutic for you; if your energy level is running low, a few exchanges with students will energize you.

Read Inattentive Behaviors

We all have observed inattentive behavior in teaching situations. Some behaviors to look for are shuffling or shifting in chairs, persistent coughing by one or more students, glances at other students or watches, stacking books when there are five minutes left in the class period. These behaviors indicate that you have lost student attention. Also notice posture, attitude, lack of eye contact.

When you notice such behaviors, your response should be immediate and decisive. Silence is often effective in regaining student attention. Calling the student by name to engage him or her in conversation should dispel the student's inattention. Moving about the classroom can alleviate inattention. If a student senses your presence close by, he or she may become more alert. Changing the pace of the class can be most effective. For example, switching from lecture to small-group activity can wake up the class. Breaking the rhythm of your usual behavior can break the monotony. Another suggestion is allowing breaks, particularly in classes over an hour and fifteen minutes long.

Commit Yourself to At Least One Individual Conference With Each Student

These conferences need not be long when the students do not have significant problems. They may simply be friendly, personal conversations. Yet this kind of conference shows the student that you care about him or her. For those students with significant problems, however, the conference is crucial. Often a conference is the only means of convincing them of your interest. Sometimes you yourself can solve some of the student's problems, or you can guide the student to someone who can help him or her. Surprisingly, many students are not familiar with the counseling services available at the University.

One word of caution is in order here. Discuss the problem only with the student (or perhaps, if you feel it is necessary, with your department chair or supervisor.) Otherwise, respect the student as an adult and keep information concerning his or her performance confidential.

Telephone Students When High-Risk Patterns Develop

Examples of high-risk patterns are several missed assignments, chronic absences, and perpetual tardiness. Telephoning students can be an effective way of reaching them; students are often impressed that an instructor would take the time to call them.

Devote the First Week of Class to Creating a Positive Learning Environment

Research indicates that students who feel comfortable in the classroom setting and who have some positive rapport with the teacher are much more likely to speed up learning processes as the quarter goes on. Students often surpass normal course expectations if they feel very positive about the learning climate. In the long run you will accomplish more learning by devoting the first few classes to creating a supportive environment.

Communication Checklist

Adapted from Jenkins, Gappa, & Pearce, 1983

Faculty and TAs may find it difficult to be aware of the interactional dynamics in the classroom while simultaneously transmitting lecture content or guiding a discussion. Have a friend, colleague, or teaching assistant observe some specific behaviors of your own or your students' that you want carefully observed. This informal observation may give a perspective on that

behavior about which you were not aware.

A student can tape record some of your classes. Self-analysis of tapes can provide answers to many questions.

Here are brief summaries of key points arranged in checklist form.

- **Techniques:**

- What language patterns am I using?
- Is there a regular use of male referencing, or the generic "he" or the universal "man"?
- Are stereotypical assumptions about men and women, people of color, or people of foreign origin revealed in classroom dialogue?
- Are examples and anecdotes drawn from men's lives or white culture only?
- Can different patterns of reinforcement be detected from the tapes?

- **Classroom Interactions:**

- Are you conscious of sex or race-related expectations you may hold about student performance?
- How do you react to uses of language (accent, dialect, etc.) that depart from standard English or that are different from your own? Do you discount the speaker's intelligence and information?
- What is the number of males versus females or students of various racial or international groups called on to answer questions? Which students do you call by name? Why?
- Which of these categories of students participate in class more frequently through answering questions or making comments? Is the number disproportional enough that you should encourage some students to participate more frequently?
- Do interruptions occur when an individual is talking? If so, who does the interrupting? If one group of students is dominating classroom interaction, what do you do about it?
- Is your verbal response to students positive? Aversive? Encouraging? Is it the same for all students? If not, what is the reason? (Valid reasons occur from time to time for reacting or responding to a particular student in a highly specific manner.)
- Do you tend to face or address one section of the classroom more than others? Do you establish eye contact with certain students more than others? What are the gestures, postures, and facial expressions used; and are they different for men, women, people of color, or international students?

- **Texts, Lectures and Course Content:**

- Whenever possible, do you and the texts you choose use language that is sex-neutral? If your text uses the masculine generic, do you point this out in the classroom?
- Do your texts and lectures incorporate new research and theory about men, women, and people of color? If not, do you point out areas in which scholarship about gender and race is modifying the discipline? Do you provide additional bibliographic references for students who want to pursue these issues. When you order books for the library, do they reflect these changes in the discipline?
- Do your lectures and texts portray the activities, achievements, concerns, and experiences of women, people of color, or people of foreign origin? If your texts do not, do you provide supplemental materials? Do you bring omissions to the attention of your students?
- Do your lectures and texts present the careers, roles, interests, and abilities of women and people of color or foreign origin without stereotyping? If there are stereotypes in your texts, do you point this out?
- Do your lectures and texts use balanced examples and illustrations (both verbal and graphic) in terms of gender and race? If your texts do not, do you point this out?
- Do your texts and lectures reflect values that are free of bias with respect to sex, race and ethnic or national origin? If not, do you discuss your/their biases and values with your students?
- Do your exams and assignments encourage students to explore the roles, status,

contributions, and experiences of women and people of color or foreign origin?

Classroom Management

Adapted with permission from Unruh, 1986

In most cases you eventually will face students who present various kinds of management problems. A common example is the student who wants to talk too much, frequently on irrelevant material. You can treat these students with respect but make it known that they are overpowering the discussion; by systematically calling on many members of the class, you can often get a very active class. The students seldom want one person to dominate any more than you do.

Frequently it is useful to talk to the offender outside of the class. Students usually respond to your request for less or different participation on their part. Sometimes they lapse back into the old pattern. It is a natural pattern for this kind of student. Remember that these students are seldom deliberately destroying the class; they think that they are adding to the class with their participation. Don't hesitate to remind them politely if they forget their talk with you.

One technique which is often effective with wisecracks and insults is to treat them as straightforward, non-evaluative statements. Treat sarcastic remarks as if they were not sarcastic. Some such remarks should, of course, just be ignored. Either treatment takes the sting out of the comment because you are not responding the way the wisecracker wants you to. Just refuse to play the game. You'll be doing the rest of the class - and yourself - a favor.

Resolving Disagreement

Adapted with permission from University of Tennessee, 1986

In dealing with disagreement, confrontation, and inappropriate behavior, the new instructor or TA should probably seek the advice or guidance of a more experienced person. Department heads and coordinators for teaching assistants have dealt with similar problems and can advise you on appropriate steps. New instructors are often afraid to share problems because they feel that these problems are their own fault or constitute a poor reflection on their teaching abilities. Similar problems arise continually, however, with new or experienced faculty, young or old, outstanding or less capable. In fact, students sometimes sense an inexperienced faculty member and believe they can "get away with" more because of the instructor's lack of experience. For these reasons, and for the reassurance it gives, it is usually best to discuss classroom problems with someone who can help you.

Dealing with a student who disagrees politely, calmly, rationally is a pleasure. If you state your position openly, calmly, and rationally, the two of you are almost certain to reach a reasonable solution. It is with open hostility or conflict that most problems occur. Here are some suggestions for dealing with confrontation:

- If the confrontation occurs in a public setting, attempt to remove it to a private setting, e.g., an office. Often the confronter relies on the public nature of the attack and the encouragement of other students to press the argument.
- Listen carefully, openly, and professionally to the full criticism or grievance. Do not attempt to respond to allegations made during the narrative. Let the critic express all existing problems. Repeat the main points of the argument, as you understand them, to be sure both of you see the same issues.
- Accept any valid criticism and state your intended corrective action. Show a genuine willingness to compromise where you feel it is appropriate.
- Explain that you have different thoughts on the issue and would like an opportunity to express your point of view. State your opinions, and allow your critic to respond.
- If it appears that the issue cannot be resolved in a mutually satisfying way, indicate regret that there remains a difference in view. Restate your position, making clear any action you intend to take. Indicate what recourse your critic has to other appeal channels.
- Move in a polite and professional manner to close the conversation.

- If the critic becomes agitated, remain calm. Often your remaining calm will return the conversation to a more placid tone.
- It sometimes helps to ask a colleague to join in a confrontation, if the colleague can remain neutral and point out possible routes for solution of the problem. The student can also see the other person as a guarantee of fairness in the proceedings.

Using Instructional Media

Adapted with permission from Unruh, 1986

Instructional media materials should be used selectively -- they are most beneficial when they fit your instructional objectives. Before opting to use certain materials, ask yourself: Would the information be more effectively presented in another way? Is there a strong possibility that attitude or behavior change will be an end result? Will the presentation improve recall or help students remember important facts, enhance the quality of discussion, or increase students' ability to apply information? Attractive as they may be, instructional media materials are only as good as the planning, thinking, and preparation which preceded their use.

Once selected, audio visual materials (which may include photographic slides, overhead transparencies, films, videotape recordings, charts, diagrams, models, or illustrations) may make presentations more effective by presenting new information, eliciting, an emotional response, suggesting something new, explaining, or raising questions. Materials which are unique for students keep presentations interesting. If they are not unique, creative use of audio visual materials help the instructor challenge the student with the unexpected. For example, one instructor showed his students only the last few minutes of a film and had them conceive of the portion which they had not seen. With careful planning and use, instructional media materials strengthen the instructor's teaching by stimulating student interest and directing their responses and learning.

Chalkboard Use

Adapted with permission from White and Hennessey, 1985

Perhaps the most widely used medium of instruction is the chalkboard. The guiding principle of chalkboard work is: Look at your writing as though you were a student in your own class. Almost anything you put on the board will be clear to you. The task, however, is to make your presentation clear to your students. Some points to keep in mind while planning a chalkboard presentation are the following:

- **Students must be able to see and to read what you have written.**

Illegible or obscured work is valueless. Watch out if you have small handwriting, tend to scrawl, or write too lightly. Before class write something on the board and then go to the back of the room to see if it is legible. Sit in one of the last rows and take a critical look at your board work. Unless the floor of the classroom is sloped, students in the middle of the room won't be able to see the bottom of the board. Some instructors like to mark off the "bottom line of visibility" with a chalk line. If there is a desk at the front of the class, keep it clear of objects that might obstruct vision. Additionally, try to keep your work visible for as long as possible. If you are right-handed, fill the right-hand panel first, then move to the panel on the left and continue your writing. In this way you will not be blocking the view of students copying the writing you have just completed.

- **Your board work must be organized so that students will be able to interpret their notes later:**
 - First erase the board completely. This step is especially important in mathematics, where stray lines may be interpreted as symbols.
 - If you are to solve a problem or prove a theorem, write a complete statement of the problem or theorem on the board, or write a precise reference.
 - Fill one panel in at a time, always starting at the top and moving down.

- Make your notation consistent with that in the textbook so that students do not have to translate from one system into another.
- Underline, or in some other way mark the most important parts of your presentation: the major assumptions, conclusions, or intermediate steps that you plan to refer to later on. Colored chalk may help to clarify drawings.

- **Erase only when you have run out of space to write.**

Modifying board-work in midstream can be frustrating for students who are trying to transcribe your material into their notebooks. A physics instructor may reach a crucial point in the derivation of an equation and then quickly erase and replace terms. A biology instructor may draw a diagram and then rapidly change first one part of the diagram and then another to show a process. If you are modifying a drawing, use dotted lines or some other technique to show changes. Remember that students cannot make the same erasures that you do without losing their written record of intermediate steps; you can alter parts of a drawing much faster than they can reproduce the whole thing.

- **If you find that you have made a mistake, stop.**

Don't go back over the last three panels madly erasing minus signs: first explain the error, then go back and make corrections, if possible, with a different color of chalk.

- **If you are presenting material that you want students to duplicate in their notes, you need to give them time to copy what you have written.**

They should not be asked to analyze while they are writing. When you want them to make or discuss a point, stop writing. Let people catch up to you (they may be lagging behind by two or three lines). Then begin your discussion. Similarly, if you have engaged in a long discussion without writing very much on the board, allow them time to summarize the discussion in their notes before you begin to use the board or to speak.

- **Avoid using the chalkboard as a large doodling pad.**

Students assume that what you write on the board is important. The board should serve to highlight and clarify your discussion or lecture. Used wisely, the board will enhance and underscore your presentation, not diminish it.

- **Find out if you are using the board effectively.**

- At some point, ask your students if they can read or make sense of what you have written. Don't do this every five minutes -- an occasional check, however, is in order.
- After class, without prior notice, request one of your good and one of your average students to lend you their notes. If the notes seem incomplete or incoherent, ask yourself what you could have done to make your presentation more clear.
- View a videotape of your presentation, putting yourself in the place of a student taking notes.

PART ONE: STRATEGIES FOR TEACHING (Continued)

LECTURING

Lecture Preparation

Adapted with permission from Farris, 1985

Lecturing may still be the most common form of teaching in most university classrooms, but some topics lend themselves much more naturally to this technique than others. Originally the "lecturer" read to an audience because access to written material was limited; now the printing

process has dramatically changed the lecturer's function. The present-day lecture should not simply transmit information; books are more efficient. Use lecture(s) if you want to provide structure and organization to scattered material, help pace student learning, or reinforce assigned reading by providing an alternative perspective or source of information.

Planning a lecture

When you start to plan a lecture, first consider your audience. Undergraduate students represent a broad cross-section of backgrounds and skills, and as a result may arrive at college with varying levels of competence. You neither want to talk over their heads nor patronize them. You will be more effective if you try as much as possible to draw on knowledge they already have or appeal to experiences that, by analogy, suit the topic.

Before preparing the lecture, ask yourself: how does the lecture fit into the course as a whole? What are your objectives? Do you want to provide the students with an overview of the subject, give them some background information, or provoke them into further contemplation?

Once you've decided that the nature of your topic is indeed suitable for a lecture and considered both your objectives and the knowledge level of your audience, you still want to make sure that what you need to cover will fit within the time allotted. A typical lament if new instructors is: "There is so much material and too little time." However, good organization will enable you to eliminate irrelevant material so that you may cover important points more thoroughly.

Generating an outline

Once you have determined your subject, formulate one general question which covers the heart of it, one you could answer in a single lecture. Take time to write it down and study it. Then generate three or four key points which you could develop to answer this question. Note these down under the question. You are now gazing at your lecture outline.

Filling in the outline

Your next task is to define the elements of your key points and generate effective examples or analogies for each. Examples generated "on the spur of the moment" in class tend to be trivial; if prepared in advance, examples can both illustrate a particular point and broaden students' understanding of the subject. Think the examples through carefully and consider ways to illustrate them with chalkboard diagrams, slides, overhead transparencies, demonstrations, or case studies, any of which can increase students' understanding and interest.

Reviewing the material

Adapted with permission from University of Nevada

Demonstrating that you know more than your students is easy; teaching is more difficult. Many new instructors assume that they can teach introductory math because they took one course in statistics and two in quantitative analysis. However, an in-depth understanding of the subject is often necessary for dealing with the bright, inquisitive student who asks a relevant question that is not covered in the text: "Why didn't you use that same formula to solve the last problem?" Ideally, you will be assigned to a course in the area of your particular expertise, but you should still review material to refresh your memory, and you might try explaining it to someone else as a way of anticipating students' questions and problems.

Delivering the Lecture

Before you begin, there a number of points to remember about the style and clarity of your lecture presentation. We would like to make the following suggestions to ensure that your lecture is clear and well received: (Adapted with permission: Cashin, 1985)

- **Speak clearly and loud enough to be heard.** This may seem obvious but undoubtedly we have all sinned against this prescription. Perhaps in the very first class you should suggest that people signal you if they cannot hear, e.g., cup a hand behind their ear.

- **Avoid distracting mannerisms**, verbal tics like "ah" or "you know," straightening your notes or tie or beads.
- **Provide an introduction.** Begin with a concise statement, something that will preview the lecture. Give the listeners a set or frame of reference for the remainder of your presentation. Refer to previous lectures. Attract and focus their attention.
- **Present an outline.** Write it on the chalkboard, or use an overhead transparency, or a handout. Then be sure that you refer to it as you move from point to point in your lecture.
- **Emphasize principles and generalizations.** Research suggests that these are what people really remember -- and they are probably what you really want to teach.
- **Repeat your points in two or three different ways.** Your listeners may not have heard it the first time, or understood it, or had time to write it down. Include examples or concrete ideas. These help both understanding and remembering. Use short sentences.
- **Stress Important Points.** This can be done with your tone of voice. It can also be done explicitly, e.g., "Write this down"; "This is important"; "This will be on the test."
- **Pause.** Give your listeners time to think, and to write.

Ways to Begin

Having prepared an interesting, detailed lecture, it is still sometimes difficult to decide upon a way to begin delivering it once you are in the classroom. Here is a list of possible techniques for beginning a lecture, many of which rely on some kind of "hook" to capture students' attention from the start. (Adapted with permission: Bailey, 1986)

- State a question which will be answered (or at least better understood) by the end of the lecture.
- Pose a problem. The difference between this and stating a question is that a question is typically a single sentence, while a problem may require paragraph or two.
- Give an example of the phenomenon to be discussed.
- Tell a personal anecdote or one about a friend or famous colleague.
- Create a demonstration which illustrates the topic, or puzzles the students.
- Provide a review of some previously covered material, when directly related to and essential for understanding the current lecture.
- Provide an overview of the lecture.
- State the objectives to be accomplished with the lecture
- Tell a funny story or joke, if relevant to the material
- Give the lecture a title.

Questioning in the Classroom

Adapted with permission from Hyman, 1980

Strange as it may seem, many college teachers are ill at ease when students ask questions. For some reason they have not learned how to field questions. Fielding is a broader concept than responding; responding is but one fielding option. The skill of fielding student questions is vital for a teacher who wants students to think about the topic of 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 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 really not on target." Sometimes an instructor will answer the student's question and then say something like, "Where were we before we got sidetracked?" 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 of both the content and of 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 the track and 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 weigh the advantages gained by permitting and encouraging questions against the need to maintain tight control.

By learning how to use questions effectively in the classroom, instructors can accomplish a number of interrelated goals. First, by engaging students in a question and answer dialogue, the usual "one-way" flow of information from instructor to students is transformed into a more interactive process. Students become more active participants in their own learning. In addition, skillful questioning can encourage students to engage in higher level cognitive processes (analysis, synthesis, and evaluation), thus helping to develop their capacity for critical thinking. There are several tactics suggested by the current literature which may assist teachers in improving the use of questioning in their teaching. (Adapted with permission: Hyman, 1980)

- **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, use complex cognitive processes, and begin to ask more questions. One word of caution is in order here, though. Sometimes when teachers reword questions because they believe that the initial question is unclear, the result is greater student confusion. Students may not know which question to try to answer. In short, ask a question, wait, and thereby express your expectation to receive a response and your willingness to listen to it. Be patient.
- **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 humans 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 will gradually get lower and lower as the instructor finally concludes with a question very different from the one for which the hands were initially raised."
- **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. The instructor might say, "Are there any questions or clarifications of points we have raised?" or "Please ask questions about the main characters or the minor characters whichever you wish at this point," or "In light of Sally's allusion to Lady MacBeth, I invite you to ask her some questions for embellishment or 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.
- **Use a variety of probing and explaining questions.** Ask questions that require different approaches to the topic, such as causal, teleological, functional, or chronological explanations. Avoid beginning your question with the words "why" and "explain", and instead phrase your questions with words which give stronger clues about the type 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 a woman'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 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 incorporates your idea into its social and economic policy?"

Rewarding Student Participation and Providing Feedback

Adapted with permission from Hyman, 1980

In responding to student questions there are a number of guidelines which can positively reinforce good student responses and facilitate further discussion.

- **Praise the student in a strong positive way for a correct or positive response.** Use such terms as "excellent answer," "absolutely correct," and "bull's eye." These terms are quite different from the common mild phrases teachers 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 praise and then comment on it.
- **Make comments pertinent to the specific student response.** For example, suppose that a student has offered an excellent response to the question, "What function did the invasion of the Falklands serve for Argentina?" The instructor might say, "That was excellent, Pat. You included national political reasons as well as mentioning the Argentine 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 listened carefully to the student's ideas.
- **Build on the student's response.** If the instructor continues to discuss a point after a student response, he or she should try to incorporate the key elements of the response into the discussion. By using the student's response, the teacher shows that he or she 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.
- **Avoid the "Yes, but ..." reaction.** 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 that the response is correct or appropriate with one breath and then takes away the praise with the next. Some straightforward alternatives can be recommended:
 - Wait to a count of five with the expectation that another student will volunteer a correct or better response.
 - Ask, "How did you arrive at that response? (Be careful, though, not to ask this question only when you receive inadequate responses, ask it also at times when you receive a perfectly good response).
 - 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."
 - Say, "Thanks. Is there someone 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 alternatives as examples, you will probably be able to generate others as needed.

Teaching Outside the Field of Specialization

Adapted with permission from University of Nevada

If you are assigned to teach outside of your specialty, you'll have to work to stay at least a week ahead of your brightest students. Remember that you are not responsible for knowing all the answers, so don't feel compelled to apologize for your "lack of knowledge." If you cannot answer a question or you have made an error, admit it, but tell your students where they may find the answer or offer to look it up ... and then do it (this is good advice for teaching within your own field as well). University students are usually forgiving in nature, but the one thing they will not tolerate is subterfuge on the part of an instructor.

Teaching Large Classes

Adapted with permission from Illinois Instructor Series No. 1, University of Illinois, 1986

Teaching large classes is a major undertaking. It requires academic competence, leadership skills, the capacity to do advance and contingency planning, the ability to organize well and to purposefully carry out plans. Fortunately, many of these qualities are characteristic of faculty members and are frequently used -- in mapping out research projects, planning conferences, writing books and research papers. Most of the abilities needed to teach large classes are ones faculty members already possess and can successfully adapt to large scale instruction.

What contributes most to success in large class teaching?

To find answers to this question, the authors interviewed several faculty members recognized as outstanding large class instructors by their peers and students. We asked them what advice they had to give colleagues about teaching large classes.

Each one of the large class instructors indicated that the single most important factor is organizing before the term starts. The time spent planning before the course helps eliminate problems later on. According to these instructors, there are several key elements which require specific attention.

Decide early what specific content will be taught.

Usually there is more you'd like to teach than can reasonably be presented in one quarter; so you have to select a subset of content. Your colleagues may show you how they have taught the course before. However, unless there is a departmental syllabus most content decisions are up to you. Because of the time required to develop large-class lectures and supporting materials, last minute content changes are difficult. Plan ahead.

Anticipate what students already might be expected to know about the topic.

One of the challenges of large-class instruction is to teach so that both the students who lack background can understand, and those who are well-prepared stay interested. Ask another faculty member or a departmental student advisor about the expected level of student preparation and ability. If possible, note which curricula are heavily represented in your classes. This information may point to prior student preparation in your area. It also can help you select among examples and make assignments that relate to student experiences.

Select texts and supplementary readings well before the course begins.

There are two major reasons for selecting a text carefully. First, many students find it difficult to take accurate notes when listening to an hour's uninterrupted lecture. They rely on their text to clarify the content and their notes. The closer the textbook corresponds to your course syllabus, the more useful it should be.

Secondly, most texts (unless you've written one for the course) do not always accompany the course as you have planned it. Materials to supplement the text become necessary. In addition to readings, supplementary materials might include problem sets and copies of visuals used in class.

Order texts and supplemental material early so they are available at the beginning of the term. Written permission must be obtained before copyrighted material can be reproduced. Some

copying centers will help you get this permission. Arrangements can be made with a local copying center to prepare and sell supplementary course materials.

Look over the classroom before the first meeting.

When you visit the lecture classroom, pay attention to blinds, the placement of light switches, sources of controlling ventilation and other housekeeping details. A room that is comfortable with only a few people may become uncomfortably warm when full of students.

Make arrangements well before the first class meeting for any teaching aids you might want to use such as an overhead projector, microphone, or film or slide projector. Make an appointment with Campus Media Services (2 EL) for instruction in the use of audio-visual equipment. Also find out how you can get immediate assistance if the equipment malfunctions during a lecture. You may want to ask your teaching assistants to help you set up the room before each lecture.

Stand in the spot where you will lecture. Practice with the equipment you'll use during class. Note how well your voice carries and how your handwriting looks from the rear of the room. Have another person sit in various seats to give feedback from the students' perspective.

Communicate your expectations for the quarter.

At the first lecture of the quarter, distribute the course syllabus and direct students' attention to the most important statements. See the section in this handbook on the syllabus for more detailed information on the important elements of syllabus construction.

Should I plan to lecture on the first day?

Very definitely. Use any available course time. Later in the term you may want extra time to review or repeat material. The first day of class is also one period that most students are attentive and curious about a course. Take advantage of their interest. A well-organized first class lets the students know that you are competent and prepared, and sets the expectation that they too ought to be conscientious in the course.

What is a reasonable length of time to spend preparing each lecture?

Because students may not ask as many questions in a large class, you must usually be prepared to talk for the entire period, that is, unless you have structured discussion time or individual or small group work into the course. The chances of having a good presentation increase the more thoroughly you plan. In addition to the time spent preparing your presentation, many experienced instructors recommend reserving the half-hour prior to class to "psych" up -- review the lecture, check that you have everything you need, and bring yourself up to the energy level needed for a lengthy presentation. Through experience you'll find out how much time you personally need to prepare a large-class lecture.

How can I keep students attention during a lecture?

Spending time on lecture preparation is necessary; however that time alone will not guarantee a good lecture. Students cannot learn what they cannot see and hear. In a large class, public speaking skills are important. Speak slowly, loudly and clearly enough to be understood. Don't underestimate the value of a microphone.

Accurate student note-taking is important. Make sure your writing is legible in every section of the room. Ask students and teaching assistants if they can understand you and read your handwriting. There are several things you can do to help students take complete notes. If you use previously-prepared overhead transparencies, pause in your lecture to allow students to copy them. Consider making available paper copies of the transparencies. A paper copy might contain major subject headings and complicated formulae and diagrams. If you leave space for additional notes, students can remain active listeners. They have time to listen, and they make fewer mistakes than if they were hastily copying long and detailed material.

Even under the best of conditions, students find it hard to stay alert for the entire class period. There are many devices which instructors may use to keep or regain students' attention. You can:

- Alter the pitch and tone of your voice
- Ask a rhetorical question
- Ask students to write specific answers to a question you pose in class
- Ask students to write examples or non-examples of key concepts you've mentioned
- Ask students to turn to their neighbor and explain why something is an example of a key concept

Keep in touch with your students

You can maintain contact with students even in large classes. Let students know early in the term that you like talking with them about the course. Come to class early and chat with those students present. Ask for volunteers to form a weekly feedback group to meet with you.

In addition to meeting with interested class members, you should "take the pulse" of the entire class early enough in the term to make any necessary changes based on your reading of student feedback. Ask them to answer short, simple questions such as "What do you like about the course? What would you like changed? Suggestions?"

Plan all aspects of testing and grading very carefully

Think about grading and exams when you first plan the course. Questions about exam timing and organization often begin with questions about course content. Ask yourself what content is most important, least important, stressed most in class, in assignments? Decide who will contribute the test questions. Teaching assistants may contribute to the construction of exams.

Some other considerations are:

- How many examinations and assignments are to make up the final grade?
- How is each examination and assignment to be weighted?
- How will tests be distributed and returned?
- What will the policy be on missed exams and make-ups?
- To avoid wasting time and to prevent cheating, think about the mechanics of testing large groups of people. The following recommendations have been made by faculty:
- Have students seated by their discussion groups so that teaching assistants can take attendance and see that only those students registered are taking the exam
- Create two versions of the test by changing the order questions are placed in
- Number each test and answer sheet. Ask teaching assistants to record the number of the booklet the students has turned in

PART ONE: STRATEGIES FOR TEACHING (Continued)

FACILITATING DISCUSSION

Preparing for Discussions

Discussions differ from lectures in many ways. A major difference is that the students can be more active and that there can be more personal contact. Good discussions give students an opportunity to formulate principles in their own words and to suggest applications of these principles; they help students become aware of and define problems implied in readings or lectures; they can also increase students' sensitivity to other points of view and alternative explanations. (Adapted with permission: Unruh, 1986)

Some new instructors may wonder how there can possibly be enough to say to fill the class period. This will be the least of your worries. Your job is facilitating and moderating the discussion, not doing all the discussing. New instructors sometimes tend to overmanage the situation. Remember that the discussion isn't just a matter of your communication with your students; it's a chance for your students to share ideas and pool resources. Many discussion leaders overlook this potential and end up trying to carry the whole conversation themselves. (Adapted with permission: Ronkowski, 1986)

There seems to be an unfortunate misunderstanding about the amount of preparation that discussions require. Too many instructors assume that you can "just walk in" to the classroom and begin useful discussion. It is as if they feel that, with a basic understanding of the subject, they can rely upon their students for 40 or 50 minutes. However, a good discussion takes a great deal of prior planning and review of the subject matter. To begin with, the content itself must be reviewed and brought up to date; that is why keeping up in one's field is so very important. Inevitably in a discussion, a question about present applicability or trends, etc., will be raised, and at that point you can be of great help if you are able to relate what is being discussed to the most recent events or developments in the field. It is also helpful to be knowledgeable about the backgrounds and interests of your students. This is why student information and background sheets and get-acquainted sessions at the beginning of the term are useful. For example, if you know that the mother of one of your students works as an accountant in local industry, you may be able to make a lesson on accounting procedures more meaningful by drawing upon the student's knowledge of the parent's activities. Prior planning also enables you to anticipate the kinds of questions that will emerge during the discussion. In this way, you can provide more appropriate and helpful sorts of answers to those questions. You can also consider how the questions might be referred to other students, thereby helping them to reinforce their understanding. (Adapted with permission: Northeastern, 1984)

Before the session meets, decide what kind of discussion is most useful for your class. Is there a certain topic to be discussed? Does the group have to reach a conclusion or come to an agreement? Is there subject matter that must be learned? Is the class a forum for expressing and comparing views? Is it important that the students carefully analyze the topic or that they learn certain skills? Once you have decided what kind of discussion you want, tell the students. It is easier for everyone if the goals for the class have been clearly stated. (Adapted with permission: Unruh, 1986)

Implementing Discussions

Adapted with permission from Ronkowski, 1986(Previously adapted from McKeachie, 1978)

Before you can successfully implement a discussion session, you will need to become aware of the implicit set of attitudes and messages you bring into the classroom with you. Your reactions, your responses to students, the attitudes you project in your actions -- all suggest to your students the sort of interaction they can expect. The way in which you field students' comments will give the most important clue. No one wants to feel that their remark will be put down or put off. Students are also sensitive to what they think you really want (e.g., Does he want a discussion or a chance for an extended monologue? Does she say she wants disagreement and then gets defensive when someone challenges her?) Your students will try to read you so that they can respond appropriately. Be sensitive to the clues you give them.

There are a number of techniques you can use in opening up discussion. The most obvious is to draw upon students' questions and comments and to enlarge upon them with your own remarks. What do you do if the subject matter is new and your students are too? You may want to write several statements or questions beforehand and use these as a springboard.

When you start a discussion with a question, ask open-ended questions which will get students thinking about relationships, applications, consequences, and contingencies -- rather than merely the basic facts. You've probably often heard a speaker read off a list of questions that require only brief factual replies and little student involvement:

Q. When was the Battle of Hastings? A. 1066.

The result could hardly be called a discussion. You'll want to ask your students the sorts of questions that will draw them out and actively involve them, and you will also want to encourage your students to ask questions of one another. Above all, you must convey to your students that their ideas are valued as well as welcomed.

Some behaviors to avoid when asking questions are:

- Phrasing a question so that your implicit message is, "I know something you don't and you'll look stupid if you don't guess right!"
- Phrasing a question at a level of abstraction inappropriate for the class. Don't just show off your 25 cent words -- discussion questions need to be phrased as problems that are meaningful to student and instructor alike.
- Not waiting long enough to give students a chance to think. The issue of "wait time" is an often ignored component of questioning techniques. If you are too eager to impart your views, students will get the message that you're not really interested in their opinions. Most teachers tend not to wait long enough between questions or before answering their own questions because a silent classroom induces too much anxiety in the instructor. Try counting to 10 slowly after asking a provocative question to which you are just dying to respond yourself. Students don't like a silent classroom either. Once they have confidence that you will give them time to think their responses through, they will participate more freely.

Maintaining Control Over Discussion

To speak of "controlling" a discussion may be misleading since in this setting what you are really doing is relinquishing control over the learning process to your students.

Running a discussion skillfully requires creating a context of "organized spontaneity" in which "the good discussion leader gives the students opportunities and incentives to express themselves and develop skills within the otherwise somewhat passive context of the lecture course." (Segerstrale, 1982) One of the keys to facilitating a discussion is to guide its course without appearing to do so. Here is a list of some common difficulties instructors encounter in leading discussions which relate to the problem of "control", and some suggestions for overcoming them. (McKeachie, 1978)

- **If you habitually can't get discussion started** you first need to pay more attention to the topics you're picking; they may not be broad enough. Or you may not be using good questioning skills -- putting people on the spot or embarrassing them. (See the previous sections on questioning techniques.)
- **If one or two students consistently monopolize the floor** there are many causes at work, but the end result is a great deal of tension. You don't want to reject the one student, but then you don't want to alienate the rest of the class. You may want to take one of two approaches. Either you can use their comments to throw the discussion back to the class ("You've raised an important point. Maybe others would like to comment."), or you can acknowledge the comments and offer another outlet ("Those ideas deserve a lot more time. Maybe we can discuss them after class.").
- **If there is a lull in the discussion**, relax. This doesn't mean you've failed. Every conversation needs a chance to catch its breath. It may mean that your topic is exhausted or it may be a pause for people to digest what they've heard. If the lull comes too frequently, though, you may need to give more attention to the types of topics you're picking. You may also be inadvertently shutting down discussion by dominating rather than facilitating.
- **If students are talking only to you instead of to each other**, you are probably focusing too intently on the speaker. You can help students talk to each other by leading with your eyes, looking occasionally at others in the room. This will lead the speaker to do likewise.
- **If there are students who seldom or never talk**, see if you can find out whether they are shy, confused, or simply turned off. Watch for clues that indicate that they might want to speak up ("Alan, you seem disturbed by Dan's idea. What do you think?"). However, be careful that you don't embarrass a student into participating. You may want to make a

point of talking to this student before or after class to indicate your interest.

- **If you run out of material before the end of class**, ask your students if there are other topics they might be interested in discussing. If not, let them go early. Don't keep them the whole hour just for form's sake.
- **If a fight breaks out over an issue**, then you've got a hot topic on your hands! Facilitate! Your major task here is to keep the argument focused on the issues. Don't let it turn personal, under any circumstances.

PART ONE: STRATEGIES FOR TEACHING (Continued)

EVALUATION OF STUDENT PERFORMANCE

Determining Evaluative Criteria

Adapted with permission from Farris, 1985

Students are very sensitive to grades and the criteria on which they are based: "Will this be on the test? How much does the quiz count toward the final grade? Do you consider attendance and participation?" Grading is a thankless job but somebody has to do it, and you may as well be prepared to answer such questions on the first day of class; that means, of course, that you must have answered them for yourself well in advance.

Before constructing an exam or assignment, you need to decide exactly what it is you expect your students to demonstrate that they have learned. Reviewing the instructional objectives you established at the beginning of the term may be a good way to begin. The first step is to think carefully about the goals which you have set for the students. Should students have mastered basic terminology and working principles? Should they have developed a broad understanding of the subject? Should they be able to use the principles and concepts taught in the course to solve problems in the field? The next question is how you can best evaluate the extent to which students have achieved these goals. Perhaps, a certain type of test will suggest itself immediately (multiple choice, matching, fill in the blanks, short answer, problem solving, essay). If you know what you want to assess and why, then writing the actual questions will be much less frustrating.

Test Construction

Objective Tests

Although by definition no test can be truly "objective" (existing as an object of fact, independent of the mind), an objective test in this handbook refers to a test made up of multiple choice, matching, fill-in, true/false, or short answer items. Objective tests have the advantages of allowing an instructor to assess a large and potentially representative sample of course material and allow for reliable and efficient test scoring. The disadvantages of objective tests include a tendency to emphasize only "recognition" skills, the ease with which correct answers can be guessed on many item types, and the inability to measure students' organization and synthesis of material. (adapted with permission: Yonge, 1977)

Since the practical arguments for giving objective exams are compelling, we offer a few suggestions for writing multiple choice items. The first one is to avoid it if you can. If it is unavoidable, there are numerous ways of generating objective test items. Many textbooks are accompanied by teachers' manuals containing collections of items, and your colleagues who are former teachers of the same course may be willing to share items with you. In either case, however, the general rule is adapt rather than adopt. Existing items will rarely fit your specific needs, so you should tailor them to more adequately reflect your objectives.

Second, design multiple choice items so that students who know the subject or material

adequately are more likely to choose the correct alternative and students with less adequate knowledge are more likely to choose a wrong alternative. That sounds simple enough, but you want to avoid writing items which lead students to choose the right answer for the wrong reasons. For instance, avoid making the correct alternative the longest or most qualified one, or the only one that is grammatically appropriate to the stem. Even a careless shift in tense or verb-subject agreement can often suggest the correct answer.

Finally, it is very easy to disregard the above advice and slip into writing items which require only rote recall but are nonetheless difficult because they are taken from obscure passages (footnotes, for instance). Some items requiring only recall might be appropriate, but try to design most of the items to tap the students' understanding of the subject. (Adapted with permission: Farris, 1985)

- Here are a few additional guidelines to keep in mind when writing multiple choice tests: (Adapted with permission: Yonge, 1977)
- The item-stem (the lead-in to the choices) should clearly formulate a problem.
- As much of the question as possible should be included in the stem.
- Randomize occurrence of the correct response (i.e., you don't always want "C" to be the right answer).
- Make sure there is only one clearly correct answer (unless you are instructing students to select more than one).
- Make the wording in the response choices consistent with the item stem.
- Don't load the stem down with irrelevant material.
- Beware of using answers such as "none of these" or "all of the above."
- Use negatives or double negatives sparingly in the question or stem.
- Beware of using sets of opposite answers unless more than one pair is presented (e.g., go to work, not go to work).
- Beware of providing irrelevant grammatical cues.

Essay Tests

Conventional wisdom accurately portrays short answer and essay examinations as the easiest to write and the most difficult to grade, particularly if they are graded well. However, essay items are also considered the most effective means of assessing students' mastery of a subject. If it is crucial that students understand a particular concept, you can force them to respond to a single question, but you might consider asking them to write on one or two of several options. TAs generally expect a great deal from students, but remember that their mastery of a subject depends as much on prior preparation and experience as it does on diligence and intelligence; even at the end of the quarter some students will be struggling to understand the material. Design your questions so that all students can answer at their own levels. (Adapted with permission: Farris, 1985)

The following are some suggestions which may enhance the quality of the essay tests that you produce: (Adapted with permission: Ronkowski, 1986)

- Have in mind the processes that you want measured (e.g., analysis, synthesis).
- Start questions with words such as "compare", "contrast", "explain why". Don't use "what", "who", "when", or "list". (These latter types are better measured with objective-type items).
- Write items so as to define the parameters of expected answers as clearly as possible.
- Don't have too many answers for the time available

Responding to Student Writing

Writing is a tool for communication, and it is reasonable for you to expect coherent, lucid prose from your students. However, writing is also a mode of learning and a way for students to discover what they think about a subject, and you should be willing to participate in this learning and discovery process as well as grade the product. (Adapted with permission: Farris, 1985)

The quality of student writing is often far below acceptable standards. Many instructors try to

ignore the problem by insisting that writing skills are not part of their assigned subject area. This attitude results in further problems for both instructors and their students. If you demand good writing, make your expectations known and offer help to those who need it (or refer students to tutorial services; see Appendix A for information on the Writing Center and other available services). Students will try to meet your demands -- make your standards worth meeting.

Writing anxiety - simply a fear of writing - is the concern of many instructors who have seen their students "freeze" on an essay exam or agonize about writing a paper that they have thoroughly researched. Pat Caldwell, a professor of English at New Mexico State University, makes the following observations (based on the research of Dr. Morris Holland, Assistant Vice Chancellor of Student Development at UCLA): (Adapted with permission: Unruh, 1986)

"In the writing anxiety cycle, the anxious student has experienced previous unpleasant, stressful and (in terms of grades) unrewarding writing experiences. Remembering these experiences, he practices 'writing avoidance' - he avoids any extracurricular writing, avoids writing classes, delays taking any required composition courses and chooses a major where he perceives little need for writing. However, when he finds himself in a position where writing is unavoidable, he faces 'cognitive disruption' - his sweaty palms, erratic breathing and muscular tension break his concentration, and his confidence is shaken by memories of previous writing disasters or his uncertainty about what is expected of him. Since both 'avoidance' and 'disruption' are likely to affect the student's performance, each writing situation becomes a negative experience, which in turn enforces the writer's anxieties."

In this self-perpetuating cycle, the instructor's intervention is crucial. He or she can, either in individual conferences or in group paper-writing or exam-taking strategy sessions, counteract the students' tension by explaining how they can relax in the writing act. The instructor can combat the students' cognitive disruptions by urging them to control negative thoughts about their writing and by initiating positive writing experiences. In short, instructors can help to create a good environment for student writers - an environment which they can learn to recreate for themselves.

One way instructors can give the students a positive writing experience is with some free-writing exercises - that is, non-evaluated writing. He or she can also make a special effort to clarify paper topics and expectations on exam responses, so that students have a clear idea of what is being expected of them and the bases on which they will be evaluated. (Adapted with permission: Unruh, 1986)

More and more, instructors are involving themselves in students' writing (and learning) processes rather than simply "correcting" the final product by having them submit first drafts which are given constructive criticism on content, organization and presentation. One-to-one conferences after the student has read the critique and perhaps begun a second draft are invaluable. The second draft is graded and usually demonstrates improvement on all fronts, especially in the depth of analysis and support for an argument so often found lacking in one-draft student papers.

Also gaining in popularity with both students and instructors are peer feedback groups in which students read each other their first drafts for critique. These groups work best when a protocol is observed: generally each student reads the draft twice. The first time through group members listen only; on the second reading they write comments on their photocopy and/or fill out a form designed to address problems specific to the assignment. Then one at a time, the group members offer their comments and suggestions to the writer. One advantage to the peer feedback method is that you, the instructor, are not the only audience for the students' writing. They hear suggestions for improving their drafts from others prior to your reading of the papers. (Adapted with permission: Farris, 1985)

Grading

Reading fifty papers or 200 essay exams presents special problems, especially when all fifty or 200 are responses to the same topic or question. How do you maintain consistency? You are more likely to be thorough with the first few papers you read than with the rest and less likely to be careful with the comments when you are tired. To avoid such problems, read five or six papers before you start grading to get an idea of the range of quality (some instructors rank-order

the papers in groups before they assign grades), and stop grading when you get tired, irritable, or bored. When you start again, read over the last couple of papers you graded to make sure you were fair. Some instructors select "range finder" papers -- middle range A, B, C and D papers to which they refer for comparison.

Depending upon the number of students you have, you may have to spend anywhere from five to twenty minutes on a three to four page paper. Try to select only the most insightful passages for praise and only the most shallow responses or repeated errors for comment; in other words, don't turn a neatly typed paper into a case of the measles. Avoid the temptation to edit the paper for the student. Remember, also, that if you comment on and correct everything, a student loses a sense of where priorities lie. Do not give the impression that semicolons are as important to good writing and to a grade as, say, adequate support for an argument. (Adapted with permission: Farris, 1985)

In assigning grades to essay questions you may want to use one of the following methods: (Adapted with permission: Cashin, 1987)

- **Analytic (point-score) Method:** In this method the ideal or model answer is broken down into several specific points regarding content. A specific subtotal point value is assigned to each. When reading the exam, you need to decide how much of each maximum subtotal you judge the student's answer to have earned. When using this method be sure to outline the model (ideal or acceptable) answer BEFORE you begin to read the essays.
- **Global (holistic) Method:** In this method the rater reads the entire essay and makes an overall judgment about how successfully the student has covered everything that was expected in the answer and assigns the paper to a category (grade). Generally, five to nine categories are sufficient. Ideally, all of the essays should be read quickly and sorted into five to nine piles, then each pile reread to check that every essay has been accurately (fairly) assigned to that pile which will be given a specific score or letter grade.

Grading of multiple choice exams can be done by hand or through the use of computer answer sheets available from Academic Computer Services, 39 Richards Hall. If you choose the computer grading route you must be sure to provide number 2 pencils for students to mark answers on their sheets. These are usually available from your department's main office. At the time of the exam it is helpful to write on the chalkboard all pertinent information required on the answer sheet (course name, course number, section number, your name, etc.). Also remind students to fill in their university identification numbers completely to ensure that their answers will be properly graded by the computer.

Records and Distribution of Grades

When posting grades in any kind of public area (outside your or the TA's office, for example) be sure that students' names are not visible on the grade sheets. Grades should be recorded by ID number rather than by name. If the exams have been computer graded, the printout you receive will include a sheet with ID numbers and grades only which is suitable for posting. Another method is to record grades on the attendance roster, photocopy it, and then clip out the section of names on the sheet, leaving only ID numbers and grades.

Handing back papers or essays to a large class can be a very time consuming task. Some instructors deal with this by leaving time at the end of class to hand back assignments or tests, or they may ask students to come to their office to pick up papers. The latter alternative may provide an opportunity for students to get more personal feedback from you about their papers.

PART ONE: STRATEGIES FOR TEACHING (Continued)

EVALUATING TEACHING

Theall, M. and Franklin, J., 1990

The evaluation of faculty performance is a complex and sensitive issue because it goes beyond the theory and practice of measurement and into the assignment of rewards. Also, the results of some types faculty evaluations are often open to the public (as in course ratings catalogs). When your reputation and career are at stake, you have the right to demand that the evaluation process follow the highest standards for validity, reliability, accuracy, and fairness. While the specific focus of this section of the handbook is the evaluation of instruction, some general notes about standards for faculty evaluation are appropriate to introduce the section.

There are two basic kinds of evaluation: 1) summative, which is done for purposes of making a final decision or a judgment of worth or merit; or 2) formative, which is done for purposes of review or revision. When promotion, tenure, or merit decisions are being made, the evaluation is summative and requires careful data collection from as many appropriate sources as possible. Multiple sources of information and/or several applications of valid and reliable instruments are important here, because the results are viewed by persons other than the instructor. On the other hand, evaluation for teaching improvement is an example of formative evaluation. It is usually confidential and its data can be more simply collected (for example, with one application of a validated student ratings questionnaire designed for this purpose).

Generally, faculty performance is evaluated in three areas: teaching, scholarship/research, and service (professional, institutional, and community). Several excellent sources of information about faculty evaluation are available (see especially, the Braskamp; Centra; Doyle; Miller; Seldin; and Theall and Franklin citations in the reference bibliography at the end of this handbook). These detail the broad scope of faculty evaluation activities and provide generally similar guidelines for creating or maintaining valid and accepted evaluation programs.

Miller's (1986) list of 10 elements of successful evaluation programs is representative of the guidelines in this literature and is paraphrased below:

1. Policy reflects the institution's history and nature.
2. System is compatible with institutional goals.
3. System balances individual and institutional needs
4. Institutional and departmental expectations are described.
5. Clearly written policies and procedures are provided.
6. Policies and procedures are consistent and fair.
7. System is manageable.
8. A grievance procedure exists.
9. System is legally defensible.
10. Overall system has credibility.

Beyond the policy and practice implications of these guidelines, lie more specific rules for faculty evaluation. These might include the following:

- Seek multiple sources of data and/or multiple applications of evaluation instruments.
- Validate the instruments used in data collection.
- Develop norms (with confidence intervals or other indicators of the range of equivalent scores) for use when comparisons are made.
- Decide whether to use these norms directly for comparisons or as the basis for

criterion-referenced decisions.

- Know how to collect, interpret, and apply evaluation data.
- Separate formative roles (e.g., teaching improvement) from summative roles (e.g., promotion & tenure decision making).
- Report results in ways consistent with the role of the evaluation (e.g., course selection catalogs need only descriptive statistics taken from a general instrument; reports used for personnel decision making require appropriately normed comparisons on summary items; teaching improvement reports require details about you, your teaching, your course, and your students).
- Be sure that those who use evaluation data for personnel decision making (administrators and faculty on promotion/tenure/merit review committees) know how to correctly interpret and apply the reports they are given.
- Establish the relative weights assigned to teaching, research and service and make these public.
- Provide support for teaching improvement along with the evaluation process.
- Demonstrate to students as well as faculty that the system is valued and supported and that the information it generates is used legitimately for productive purposes.

The emphasis of this handbook is on teaching techniques and strategies. Let's now turn to a more specific discussion of some strategies for evaluating instruction.

Evaluation has always been, and remains an important part of the teaching and learning processes. Its focus can be a measurement of student progress or performance, an assessment of teaching skill, a review of materials, or an effort to enhance both teaching and learning. In each case, valid and reliable information is needed if informed decisions are to be made. Well designed and carefully conducted evaluations can provide the information upon which these important decisions about you and your students are based.

There are several reasons to evaluate your teaching performance. You might want to know how well a particular lecture was delivered; how students are responding to a new or special technique you are using; whether you providing enough or too much content based on the ability and prior preparation of your students; if your tests are perceived as complete or fair; how much material is being learned; or any of several other questions about the teaching/learning process or its results.

Just as there are many reasons to evaluate, there are many ways to gather evaluative information. Some methods are as simple as a casual conversation in which you ask students about your course, while others require special equipment or techniques (as in videotaping classes or using ratings forms). You can evaluate your own performance as you teach by attending to the non-verbal cues of your students and you can review lectures (for example) by reading students' notes. You can ask for specific comments at any time during the course and you can ask friends, colleagues, or teaching consultants to sit in on your classes and provide feedback on your teaching style, strategy, and effectiveness. Of course, your tests can also help you to assess how much students are learning. Each method has its own value, some are particularly useful for certain tasks, and some are essential if you want to understand in detail how effective you were. In the following section, we will focus on the most commonly used method of evaluating teaching: student ratings of instruction. In addition, we will point out how the data can be best used and which methods are appropriate for formative and/or summative roles. For extensive reviews of the methods you might use to collect information about your teaching, we recommend the items by Centra et. al. (1987) and Weimer et. al. (1988) which are cited in the bibliography at the end of this Handbook.

Student ratings of instruction

According to Peter Seldin's recent research (1989) student ratings are the most widely used source of information about teaching performance. The regular appearance of journal articles summarizing research findings, comments often found in non-refereed educational literature, and numerous anecdotes, all support the contention that ratings are also the most completely researched, the most widely misunderstood and the most frequently misused source of data. Research on student ratings has been going on for fifty years and its results are remarkably

consistent with respect to the validity and reliability of students as raters as long as the instruments used are appropriate and the data collection process is standardized. The following statement from Herbert Marsh's (1987) monograph summarizes this research. Marsh said:

...class average student ratings are: 1) multidimensional; 2) reliable and stable; 3) primarily a function of the instructor who teaches the course rather than the course that is taught; 4) relatively valid against a variety of indicators of effective teaching; 5) relatively unaffected by a variety of variables hypothesized as potential biases; and 6) seen to be useful by faculty as feedback about their teaching, by students for use in course selection, and by administrators for use in personnel decisions. (p. 255)

Nonetheless, misinformation about student ratings persists, especially as regards its validity and reliability. Cohen (1990) offers a succinct review of the principal "myths" about student ratings and provides the evidence to refute them.

Of more concern, is the fact that research on the knowledge and attitudes of the faculty and academic administrators who use ratings data to make decisions, (Franklin & Theall, 1989) indicates that these persons often misunderstand, misinterpret, and thus misuse ratings data. In one sense, then, the people who use data to make decisions are much more the "evaluators" than the students who provide the data. Knowing who will use the data, and for what purpose, is critical to understanding what kinds of information to collect and how to report it. (Franklin and Theall, 1990) For further information, see Doyle, (1983) and Braskamp, Brandenberg, & Ory (1984) who offer excellent discussions of evaluating teaching, and Arreola and Aleamoni (1990), who outline practical considerations in developing evaluation systems. The "contexts" in which evaluation activities take place and evaluation "systems" themselves are also important to an understanding of the process (Theall & Franklin, 1990b).

What data should be collected for what purpose?

When ratings are to be used for personnel decision making, there is general agreement that only general or global ratings are appropriate. Overall ratings of the instructor, the course, and how much students say they have learned are sufficient for this purpose as long as: 1) the items are correctly/clearly phrased; 2) the response options are 'Lickert' type on a balanced scale of at least five points; 3) the questionnaire has been validated; 4) norms have been developed as benchmarks of institutional, college, and/or departmental performance; 5) results are reported with statistics which allow correct interpretation, and with guidelines for using these statistics.

Ratings used for teaching improvement must first, be confidential. The reason is that the detail required for effective use of ratings in this case can be easily misinterpreted. A standard diagnostic questionnaire might, for example, contain items about leading discussions. If the instructor taught a large enrollment class, then it would not be possible to conduct useful discussions regularly, if at all. The result would be that students might report that the instructor "rarely" conducted meaningful discussions. This item could be ignored by the instructor because s/he knew it was an artifact of the teaching situation but if the report were available to others unfamiliar with the class and they did not note the class size and percent of enrolled students who responded (figures which absolutely must appear on any report of ratings results), then a serious error could be made to the detriment of the instructor.

The scope of teaching improvement questionnaires should include information about the students and the course as well as the instruction because such items often shed light on the instructional ratings. Knowing about student motivation, prior preparation, class, and GPA (for example) can help you to understand why some students might report that they can not follow lectures or that they find tests extremely difficult.

Another important reason for collecting information about students is that it may prevent misinterpretation of your results. As an example of the value of student demographics, lets make some assumptions about a teaching situation and its evaluation. They are: 1) that your ratings were somewhat lower than usual on the overall items; 2) that ratings were low on items relating to testing, pacing, relevance, and clarifying problems; 3) that many items had unusually high standard deviations; and finally 4) that the course's workload was considered "heavy" and the

course was rated as "more difficult than average". All in all, your ratings are considerably lower than usual and are marginal in comparison to the norms for your department. The overall ratings of your course will appear in the ratings catalog and will probably be referred to in an upcoming promotion decision. How can this evaluation help you?

A review of student demographics reveals the following: 1) about 40% of the class were seniors, 40 % freshmen, the rest, equally divided among the other classes; 2) these percentages are similar to the distributions of responses on the items about prior preparation of students, difficulty, pacing, and, in fact, most of the specific items with depressed scores.

A review of your teaching load reveals that, since your employment four years ago, you have taught only upper-level or graduate courses. The conclusion (borne out by further analysis) is that you succeeded with upper level students but the lower level students had difficulty keeping up and thus, were negative in their opinions. Is this "your fault" or are the depressed ratings more related to a scheduling coincidence and a curriculum problem? It would seem that you could make a case for the latter explanation and lessen the effect of this set of ratings on an overall assessment of your teaching performance. As a result of the evaluation, some departmental changes might be made in the requirement for this course or its placement in the curriculum. Also, you might decide (if possible) to focus on teaching upper level courses, or to work with a colleague who has been effective with beginning students, or to work with a teaching consultant to investigate the situation in more depth and to develop strategies for teaching these students. In any case, the information provided by the evaluation can be a starting point for improvements which will benefit you, your students, and your institution.

But the collection and use of student ratings does not have to be limited to teacher-course evaluation. Student ratings can also be combined with other data collected with surveys, tests, or from records, and used for classroom research into teaching and learning, assessment, program development or evaluation, and institutional research. Evaluation data can identify excellent teachers for awards, for participation in peer-colleague assistance programs, or for involvement in internally or externally funded research and development projects.

Summary

Teaching and learning are complex activities. They are affected by many variables and do not operate with complete predictability. Teaching is a combination of art, craft, and science and its evaluation requires the same combination. Because systems for teacher-course evaluation compete for classroom time and for institutional resources, they must be used effectively, efficiently, and productively. And above all, they must serve the best interests of faculty, students, and the institution.

PART ONE: STRATEGIES FOR TEACHING (Continued)

ETHICS AND THE TEACHING ENTERPRISE

There are numerous aspects of college teaching that potentially involve ethical dilemmas of one sort or another. Your roles as advisor, evaluator, administrator of exams, and authority have the potential to become problematic at times, often because they present conflicting demands. In this section we would like to broach some of these subjects and provide suggestions and resources for dealing with them.

Academic Integrity

Adapted with permission from University of Tennessee, 1986

Scholarship is at home only in an atmosphere of honest practice by both students and faculty. All

members of the academic community should conduct themselves in a straightforward and honorable manner. Study, instruction, evaluation, and research can flourish well only in such an environment.

Academic integrity is a joint endeavor. Faculty should make appropriate preparations for all student-teacher encounters, meet classes as scheduled, evaluate students' work fairly and impartially, and be prompt for prearranged conferences and regularly scheduled office hours. Inappropriate language in the classroom, off-color remarks or jokes in class as well as in personal conferences, and frequent deviations from the course topic have no proper place in the teaching academy. In turn, students should fulfill in a reasonable way the requirements and expectations of the course as stated by the instructor.

Cheating

Adapted with permission from University of Tennessee, 1986

Within this shared enterprise, instructors have another, rather heavy, responsibility, that of making certain students can function in an atmosphere free of academic dishonesty. Students need to know that if they work honestly, they will not suffer because of those who do not. Challenging a student you think may have cheated or plagiarized is not pleasant. If you feel uncomfortable in this area of responsibility, a thoughtful discussion of the topic on pages 136-137 in McKeachie's (1978) *Teaching Tips*, as well as chapter 13, "Situations," in Eble's (1976) *The Craft of Teaching*, may be helpful.

Be as positive as you can of guilt before questioning the student(s), since academic misconduct sometimes makes them liable for serious punishment. According to the seriousness of the offense, punishment can run the gamut from exoneration to exclusion from the University. Even the suggestion of guilt is upsetting to students, particularly if they are innocent.

Plagiarism

Adapted with permission from University of Tennessee, 1986

Generally, to plagiarize is to present as new and original a created production of another person without properly crediting the source; i.e., to steal or pass off, in whole or in part, the work of another person as one's own. This is not intended to be an all-encompassing definition of plagiarism. It is the instructor's responsibility and freedom to alter it to fit the course and discipline. Plagiarism, as you see it, should be defined for the students at the beginning of each course. An example for the students of appropriate use of sources can be a well-presented lecture in which you give careful credit for ideas at the end of the lecture, making a point of calling their attention to what you have done.

Privacy of Student Records

Adapted with permission from University of Tennessee, 1986

Federal law provides for the confidentiality of student records. Each instructor must take care that student records not be revealed to anyone other than the student. If you post grades of any kind, be certain to establish for each student a special identification code (or use their University ID number) which only you and the student know. Use the students' names and identification numbers to keep grade records, but do not permit any student to inspect those records.

The Family Educational Rights and Privacy Act (FERPA) of 1974, also known as the Buckley Amendment, sets forth requirements designed to protect the privacy of parents and students. The statute governs the access to records maintained by educational institutions and the release of such records.

Letters of Recommendation

Adapted with permission from University of Tennessee, 1986

Students may ask you to recommend them for a particular job, acceptance to another institution,

or graduate school. If you feel you must decline, simply explain why. If you are willing to write the letter, do so promptly, while you still have the student and his or her performance sharply in mind. A carefully written and thoughtful letter takes time and you are a busy person, but remember that others have done and will do the same for you.

Ask if there is a specific form to be used or whether a letter is needed. Have the student note the nature of the job or situation for which he or she is applying and any particular abilities that you might mention. Then be as specific as possible. Focus on the student's best points, but don't exaggerate; be honest. Be sure to define the context within which you knew the person, e.g., in class, as an advisor formally or informally, and state over what period of time. If you later see the student for whom you wrote the recommendation, ask about the results. This not only lets the students know you are interested but gives you feedback on your own letter-writing efforts.

Keep in mind that you are legally responsible for statements you make in your recommendation, to the extent, at least, that you are liable for any deleterious remarks you make. If you have reason to be concerned about something you want to express, preface what you have to say with something like "To the best of my knowledge ..." Remember that "libel and slander are both methods of defamation, the former being expressed by print, writing, pictures, or signs; the latter by oral expression." (*Ajouelo v Auto-Soler*)

Under the Educational Rights and Privacy Act, a student has the right to see a copy of your recommendation unless he or she is willing to sign a waiver. If you have no objections, this problem can be circumvented by giving a copy of the recommendation to the student.

Sexual Harassment

The following are some general guidelines for protecting yourself and the students you teach from sexual harassment:

- Don't ask students to do favors for you, of any kind. This will help to avoid misunderstandings concerning the singling out of students for what might appear to be preferential treatment.
- Schedule meetings with students during office hours or by appointment. For more informal meetings with individuals or groups, meet in public settings such as the school cafeteria or nearby cafe. It is important that students not misconstrue the sentiment behind informal get-togethers and read inappropriate meanings into your invitations.
- Attempt to resolve disputes or disagreements with students in the presence (or within hearing distance) of other graduate students or witnesses. This may prevent a disgruntled student from making false accusations out of anger over academic matters. Another alternative is to meet with the supervising professor for the course and the student simultaneously in order to avoid similar misunderstandings.

Issues of sexual harassment can be especially tricky for teaching assistants because they occupy the roles of both instructor and student. TAs are in a particularly vulnerable position: as instructors they have some power over their own students, and as graduate students they are subject to the power of the faculty over their academic records and letters of recommendation. (Adapted with permission: Farris, 1985) Therefore, the issue of sexual harassment must be addressed from two directions; the TA's potential for harassing (or being perceived as harassing) students, and the potential for TAs to be harassed by those who instruct and supervise them.

PART ONE: STRATEGIES FOR TEACHING (Continued)

WORKING WITH TEACHING ASSISTANTS

Adapted with permission from Illinois Instructor Series No. 2, University of Illinois, 1986

Teaching a large class of undergraduates with the assistance of TAs is a special instructional situation that increases the instructor's responsibilities while also requiring extra managerial and organizational skills. Following are some suggestions from faculty and TAs who have had success working together.

What sort of role should I play?

First and foremost, you are a role model - a professional. Remember this is often the TA's first experience in front of a class, and for many of them it is their first experience with the university. They will continually look to you for guidance. Not only are you responsible for conducting the course and instructing undergraduates, but also for demonstrating to the TAs, by your example, how to teach and what it is like to be a professor.

How big a part should I play in selecting my TA?

Be as involved as possible in hiring your TAs. Look for TAs who have expertise in the subject and are good communicators. Whenever possible, ask them why they want to be TAs. The TAs answers can be evaluated along with information about their content expertise and communication ability in making your final decision. A good selection process should allow you to choose (or request from your department) the most qualified candidates and meet with them as early as possible. The more advance notice your TAs have, the more they can be prepared to assist you.

When do I start planning?

The answer to this question is much the same as that for teaching a large class: start planning early. A whole quarter before you teach is not too much time to allow. Take care when making decisions about the course. First decide what will be taught. Next decide what you want the TAs to do. You will want to make decisions as to whether the TAs will:

- attend lectures
- attend weekly planning meetings
- present new material
- answer questions about the lecture in discussion or lab sections
- take attendance
- write or grade exams
- be responsible for a part of the course grade
- assign and/or grade papers
- hold office hours

Of course some of the options are different for TAs conducting lab sections, and may vary by department as well. These decisions will become policies and guidelines for your TAs so that they will know exactly what is expected of them.

When is the best time to first communicate with my TAs?

Write a letter or hold a preliminary meeting with your TAs as soon as they have been selected. If the course syllabus is ready, give it to them at this time. If the syllabus is still being formulated, you might include the TA's name, office number and phone extension so that students can more easily contact him or her. Give the TAs an overview of the course and of their responsibilities related to it. TAs also appreciated knowing something about you and your academic interests, and about the place of the course in the curriculum.

As you discuss your policies and guidelines for the course, you may want to recommend additional readings on class topics so that inexperienced TAs can familiarize themselves with the content. You may also have experienced TAs meet the new TAs to talk about some of the problems they have encountered and how they handled them.

How do I prepare the TAs for the first day of class and for teaching in general?

As close to the beginning of classes as possible, provide teacher training sessions and experiences. Following are a few suggestions for you to think about as you plan this process.

- Suggest that TA's visit their classrooms before they teach.
- Be available at specified times to answer TA's questions.
- Remind TAs of the university and departmental policies regarding capricious grading, sexual harassment, etc.
- Have the TAs write their name, office number and phone extension on the board at the first class meeting and formally introduce TAs to the class at that time (or have them introduce themselves).

How often should I meet with my TAs?

Most instructors meet with their TAs weekly throughout the quarter. You may want to include some of the following topics for consideration at your meetings.

- Review the content presented in the previous class and the topics to be introduced in the next one.
- Ask TAs about course progress and problems students are having.
- Discuss what improvements could be made. Be open and listen to what they have to say. Because TAs are often in closer contact with the students than you are, their perspectives may provide information useful for future planning.
- Involve TAs in managing the course whenever possible. TAs can write test questions, monitor exams, conduct review sessions, and assign grades.
- Discuss your criteria for grading. Review the first grades or comments the TAs give. Have grading sessions with all the TAs present, at least when they begin grading homework or tests.

Do I need to monitor my TA's progress?

To answer this question you need to consult the policies of your particular department or college, since some may consider TA performance in the allocation of further awards. In general, however, some form of formal or informal monitoring is recommended because it can help TAs know how well they are doing, and is a good way to spot problems before they become serious. Several ways to provide early feedback are available.

You may want to observe each TAs class yourself (with the TA's permission). If you do, try not to interrupt the class. Take notes if you wish and share them outside of class and privately with the TA. Many instructors prefer to have students provide feedback to the TA by responding to a questionnaire. Useful information can be gathered as early as the third or fourth week of classes. Besides providing the TA with information helpful to his or her teaching, you may gain valuable insight about the course and TA from the students' perspectives.

You can also recommend that your TAs have a videotape made of their class. Viewing the tape with the TA gives you an opportunity to provide helpful suggestions for teaching improvement.

Are TAs likely to encounter special problems?

Yes, it is safe to say that many will. Most problems are predictable and can be discussed in the orientation meeting or at a later session. Classroom management problems are common. A discussion about how to handle the student who monopolizes class discussion or who talks to another student at inappropriate times is a good topic for an early meeting.

You might also want to consider providing the TAs with appropriate, sensitive responses to use when students have questions regarding the grades they have received or changes in the assignments or requirements of the course. TAs often feel they 'caught in the middle' and are a loss for proper responses unless you have included them in discussions of course-related changes.

Finally, be sure that TAs recognize their limits in helping students. Few instructors know

everything about their subject. TAs need to understand that it is all right (and advisable) to say they don't have all the answers. Also, make them aware of the student resources that are available on campus such as the health services, career and personal counseling, tutoring, and assistance for students with unusual levels of test anxiety or stress.

For further discussion of issues pertaining to teaching assistants please consult "Part 2: The Teaching Assistantship" in this handbook.

PART ONE: STRATEGIES FOR TEACHING (Continued)

TIPS FOR INSTRUCTORS OF DISABLED STUDENTS

Special Testing Situations

Many students with disabilities require adapted testing situations. The reasons for this special need are varied: blindness or a vision impairment, a learning disability, or motor coordination difficulties are the more common reasons. Any student legitimately requiring special accommodation should provide a letter of introduction to his/her professor within the first two weeks of the quarter. Requests for adapted testing must be made by the student a week in advance by submitting to us a special form which has been completed by the instructor or teaching assistant.

Students in Wheelchairs

Little special accommodation is generally necessary for students using wheelchairs. Occasionally a student may be forced to miss class if the elevator is not operating properly. Laboratory situations may require modification of the lab station (and/or use of student aides for students with upper torso motor problems).

Blind and Visually Impaired Students

If the class you teach relies heavily on using the chalkboard, the blind or visually impaired student may have a note-taker accompany him/her to class to aid in note-taking. All requests for tape recorded, brailled, or large print tests must be made by the instructor or teaching assistant at least a week in advance.

Deaf and Hearing Impaired Students

If the instructor or teaching assistant is not a native speaker of English or if s/he speaks English with other than an American accent, the deaf or hearing impaired student will have great difficulty in reading your lips. Students who use sign language will generally use a sign language interpreter in class and in meetings with the instructor or TA. Students who do not use sign language may ask you to write your conversations with them if they cannot understand you. Generally, these students will have a note-taker in each class to write notes for them while they read your lips or watch the sign language interpreter.

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PART ONE: STRATEGIES FOR TEACHING (Continued)

INTERNATIONAL STUDENTS

Working with international students may be a new experience for some instructors, a situation which requires sensitivity to a variety of cultural differences among these students. Aspects of American culture and the American university may be quite unusual or overwhelming to some international students. Some values or assumptions about people and social interaction which are taken for granted by Americans may be understood quite differently by people from other cultures. It may be helpful for instructors to keep these differences in teaching and advising international students. Some examples of American assumptions include: (Adapted from: Althen, University of Iowa, 1981.

- People (clients, counselors, everyone else) are isolable individuals.
- Personal growth and change are valuable and desirable.
- Individuals have control over their own life circumstances.
- Personal problems are often solvable, through greater understanding of their origins and/or through remedial action taken by the individual.
- "Professional" people can help other people solve their problems.
- People (i.e. counselors, teachers) can be genuinely interested in the welfare of strangers.
- People (i.e. counselors, teachers) can be dealt with as occupants of roles.
- Open discussion of one's problems can be beneficial.
- Emotional disturbances have their root in the individual's past.
- People are (more or less) equal.
- Males and females are (more or less) equal.

Some additional issues which may have widely differing meanings and understanding across cultures include questions concerning (Adapted from Karani Lam, Lesley College):

- Independence
- Informality
- Assertiveness
- Internal control
- World view
- Religion
- Family roles

- Philosophy of development
- Male/female relationships
- Expectations in friendship
- Organizational roles
- Morality
- Materialism
- Language
- Time
- Space
- Efficiency/Reliability

PART TWO: THE TEACHING ASSISTANTSHIP

The role of teaching assistant (TA) is likely to be a part of the educational experience of many graduate students during some part of their professional training. The teaching assistant's role as an instructor is a somewhat unusual one since few TAs receive any formal training in the skills of teaching. It is often assumed that graduate students will make good teachers simply because they have achieved a certain level of expertise in their chosen field. However, it cannot be assumed that the possession of knowledge of a particular discipline provides any guarantee of an ability to transmit it to others. Beginning TAs often speak of their initial frustration with teaching because of their inability to communicate to students the information and enthusiasm they themselves have accumulated over numerous years of study. One of the tasks of the new TA, then, is to learn to translate the language of a discipline to students in a way which makes it both accessible and meaningful.

The following section has been designed with the goal of helping new teaching assistants become familiar with the various aspects of the TA role. While we have included a small section addressing some of the concerns of TAs as instructors, we would like to direct readers who are TAs to approach the all of the material on teaching presented in the first part of the handbook as a guide for their own teaching as well. The TA experience may be the only opportunity graduate students have to prepare for their future careers as college teachers. It is an apprenticeship of sorts. In compiling this section we have drawn upon the information and guidance provided in the TA handbooks of a number of other colleges and universities, and in doing so we hope to have included the best of the existing literature designed to help TAs with the tasks of teaching, advising, and evaluating students, and with juggling the various expectations of graduate student life.

It should be noted that this handbook is primarily concerned with teaching and with elements of the teaching assistant role, and as such, does not provide information on your department or the university's policies governing teaching assistantships such as the terms of employment, conditions for reappointment, stipends, etc. For this information you should consult individual graduate school catalogs, essential companions to this publication. In addition, because the information provided here is intended for TAs across the university, it may be somewhat general, thus requiring you to seek more specific guidance from faculty, administrators, or senior graduate students in your own department or college. Nevertheless we hope that this section of the handbook will serve as a guide as you embark upon your first teaching experiences at Northeastern and develop your own teaching styles and strategies. We would like to outline some of these other aspects of being a teaching assistant and to provide some very broad suggestions for operating in the TA role with respect to students, faculty, and graduate life in general.

PART TWO: THE TEACHING ASSISTANTSHIP (Continued)

THE TA AS GRADUATE STUDENT

Time Management

Adapted with permission: Unruh, 1986

As a new teaching assistant you may find yourself juggling a number of interrelated roles during the course of your appointment. You may function as an instructor, tutor, student advisor, and as an assistant to a faculty member, all while doing your own work as a graduate student. Managing time is a critical skill for TAs. It is rare to encounter a TA who doesn't feel that something essential: sleeping, thinking, personal relationships, clean laundry, etc. is being squeezed out of his or her life because of excessive time demands.

TAs need to consider carefully how best to manage their time within the constraints of academic life. Planning is the key issue. Planning (or "goal-setting" or "prioritizing", whatever you label it) is crucial to managing your time. Making lists of goals can be helpful, arranging them in order of most to least important. Analyze goals in terms of specific tasks or activities which must be undertaken in order to accomplish them. This analysis is basically the procedure to get "from here to there", so place the tasks in the order in which they must be done. Remember to include goals and tasks which are externally imposed. You may not want to grade papers or take qualifying exams, but because they are required as part of the larger goals you have, you need to plan for them. Be sure to consider what resources (money, people, time, etc.) will be necessary to achieve the task, then place it in a time context: Which task should be accomplished by what date or stage of your life?

Help From Senior Teaching Assistants

As a beginning TA you should remember that you have a great resource at your disposal in the event that you have questions or run into problems: other more experienced graduate students. They may be very helpful in letting you know how your department "runs" in the informal sense of whom to ask for specific kinds of information, who can provide you needed resources (e.g. computer answer sheets, pencils, etc.), or services such as duplicating dittos or photocopying. You might ask a senior TA to introduce you to your department's office staff so you can get to know the people who have the answers and resources you may need from time to time.

Your more experienced fellow students may also have quite a few suggestions about how to run a discussion or lab section or how to deal with students. Asking them about their classroom experiences may be a way to anticipate or resolve problems in your own discussion, lecture, or lab setting. They may also have suggestions for ways to negotiate the relationship between TAs and faculty members and provide advice for dealing with difficult situations which might arise. Fellow graduate students can be great "sounding boards" for your troubles and concerns as a TA. Very often you may find, upon consulting someone who has been a TA, that your concerns are quite common and are easily resolved. Experience is the best teacher when it comes to being a TA, so don't be afraid to ask other graduate students to share their accumulated wisdom.

PART TWO: THE TEACHING ASSISTANTSHIP (Continued)

THE TA AS STUDENT ADVISOR

Office hours

Adapted with permission from Unruh, 1986

The TA's office is an important extension of the classroom. This is one of the few places where the protective

shield of impersonality at the University can be broken. Most TAs have office hours but students are not necessarily required to come in during those times. Usually office hours are scheduled before the quarter begins and announced to the students during the first week. One alternative is to check with the students about convenient times before scheduling. Some professors may ask that you schedule your office hours at times which alternate with his or hers, thus increasing the time that one or the other of you is available to students. While the number of office hours you decide to hold per week will depend upon the arrangements you make with your supervising instructor, two hours twice a week will probably be sufficient.

How do you get students to come in? Let them know frequently that they are welcome. Invite them individually. A comment on a paper (e.g., "Please see me about this.") brings about a 75% response. Stress the importance and value of office visits both to you and to them. Most TAs deal with freshmen and sophomores who are not used to personal contact at the University. If those first few who come in have positive experiences, the word will spread. Some TAs find that posting the answers to quiz or homework problems on or around their door is an effective means of attracting students to office hours.

Helping Students Individually

Adapted with permission from Unruh, 1986

Getting students to come to your office hours is not always a problem; you may find that many students will come in, and for many different reasons. You may find yourself helping a student with the material for your course, with the logistics of a course that contains unfamiliar material, or with a personal problem. You should be aware of ways to facilitate a helpful tutorial or counseling session:

- **Try to be as approachable as possible.** The best thing to do when a student comes in during your office hours is to make him or her feel welcome. It is very easy to make students feel that they are intruding; it takes only a little bit of care to create a relaxed, pleasant atmosphere in which communication is natural and easy.
- **Rely on the student to tell you what he or she has come to see you about.** You may suspect some hidden problem, but you should not press the student to disclose it. You can help the students if they actively request your help, but your responsibility need not extend further than their requests.
- **Listen to your students when they come to your office.** Give them your undivided attention. This is all part of making students feel welcome and encouraging communication. The best way to show that you are listening is to ask questions - it also shows students that you find their concerns important. Students often fear that they are wasting your time; by listening attentively and responding thoroughly, you can help allay their anxiety.

Finally, you should realize that you won't always be able to provide the answers or information that are needed. If you are helping a student in the material for your own course, there is nothing wrong with saying, "I don't know, but I can find out for you."

In a situation in which a student is asking for more personal counseling, remember that you are not always the best qualified person for the student to be talking to. If you feel that the student needs more specific advice, you may be able to suggest someone who can provide it. They may not be able to solve all of the problems you are confronted with, but it is a start. When in doubt you should always consult the faculty member you are working with, especially if you feel that a student may be having serious emotional or some other kind of difficulties.

While in general not as many people will take advantage of office hours as could, on occasion you may encounter students who are overly-dependent on you either for assistance with course material or for companionship and counsel. It may be necessary to set limits with these students. You might try encouraging them to tackle assignments on their own before coming to you for help, or explain to them that you have limited time to spend with each student and must, therefore, restrict the frequency and duration of office visits. As indicated above, seriously troubled students who seek your assistance may be referred to professional counseling services.

Understanding Student Differences

In dealing with students both individually and in classroom settings, you should keep in mind the diversity of students attending your college or university. Undergraduates may vary in age, cultural or national background, level of academic ability, experience in urban settings, or general maturity. Sensitivity to these differences in

your interactions with students may foster your sense of rapport with them since they will be more likely to perceive you as understanding and tolerant. Moreover, many dimensions of differences in students directly affect instructional outcomes depending on the style of instruction they receive.

PART TWO: THE TEACHING ASSISTANTSHIP (Continued)

THE TA AS FACULTY-STUDENT LIAISON

As a teaching assistant, you occupy an unusual position in that you stand somewhere between the status of professor and the status of student. Indeed, you are some of both. This position allows you to play the role of liaison between faculty and undergraduate students by communicating each other's needs and desires, understandings and misunderstandings to one another. This can be one of the most fruitful aspects of being a TA, especially when your participation as a mediator facilitates the overall process of learning. (Segerstrale, 1982)

- Some ways in which this role can be played out might include:
- taking time in discussion to ensure that the course organization and requirements are clear to students
- providing students with an opportunity in discussion sections to get clarification on confusing points in the lecture
- troubleshooting any problems in the professor's lecture style or presentation (e.g., too fast, not loud enough, not enough written on board, difficult to follow, etc.) and reporting them to the professor (Gently!).

Be sure to use tact and good judgment here. It may be wise to wait until suggestions are solicited by your supervising faculty member. Some professors will be more concerned than others about how they come across to students. If you don't think your supervising faculty member will be receptive, it may be better to drop the issue or to provide the clarification students desire during your discussion sections.

TAs may also be helpful in the construction of exams by indicating to the professor whether the proposed exam material is adequately geared to the students' level of understanding. Because of your closer contact with students in sections or labs, you may be in a particularly good position to determine whether or not exam questions may be too difficult, or not challenging enough. Not all professors will include the TA in the process of constructing tests, but in the event that you are involved, you may want to reflect upon your impression of the students' understanding of the course material in putting the test together.

TAs can help students prepare for exams or complete assignments by making the professor's expectations clear. Part of this involves helping them to distinguish between what is relevant and irrelevant information (without giving it all away, of course). Depending upon the course and the professor's wishes, you may want to construct study guides for students containing important concepts and terms relevant to upcoming exams. Spending some time in discussion sections reviewing for exams may also be very helpful to students.

PART TWO: THE TEACHING ASSISTANTSHIP (Continued)

THE TA AS FACULTY ASSISTANT

Negotiating Responsibilities

Another element of the role of TA is that of assistant to a faculty member. New TAs may find this relationship very rewarding since it provides them with a sort of apprenticeship in teaching. The TA-faculty relationship may also require a delicate balance of diplomacy and compromise, though, because the boundaries of the TAs

responsibility and authority may be somewhat fuzzy. It is advisable, therefore, to attempt to determine early on just what your supervising faculty member's expectations are and to establish the range of responsibilities you will have for the quarter. These responsibilities will vary from professor to professor and across departments, some of which have well established roles and responsibilities for their TAs. Therefore, our suggestions are offered as broad possibilities, not as imperatives for operating.

Some of the questions you might want to discuss with your supervising professor early in the quarter include: (Segerstrale, 1982)

- What do you want the section to accomplish?
- How much leeway do I have in running sections?
- Will there be separate readings assigned for sections by the professor or may I make my own assignments?
- Is section attendance mandatory? Will there be a section grade?
- How much responsibility for grading will I have?
- How can I get some help for my teaching?
- How often will I meet with the professor?

There are numerous ways of obtaining answers to these questions. Here are some suggestions to keep in mind as you begin to negotiate your responsibilities as a TA: (Adapted with permission: Bailey, 1986)

You might ask directly, or wait until the instructor offers information. For example, some professors may tell you exactly what to cover in sections and assign particular readings for discussion. Others may say nothing and assume that you already know what to do. In negotiating your responsibilities as a TA, deciding what to ask, how, when, and of whom requires some subtle judgment capabilities on your part. Marching into a professor's office and making demands is certainly not advisable, yet you do have the right to have some idea of what will be expected of you throughout the course of the quarter. Your experience as a TA may go more smoothly if you learn to practice the fine art of negotiation in establishing a working relationship with your supervising faculty member.

Some faculty members may want to structure some kind of weekly meeting into your relationship where current issues and concerns pertaining to the course can be addressed. Others may accomplish this more informally by meeting now and then, before or after class, etc. This setting is where your role as a spokesperson for students is likely to be carried out. Once again, it is advisable to learn to negotiate these situations with subtlety and diplomacy.

As a teaching assistant you may or may not have the opportunity to construct your own syllabus. Many TAs will simply follow the syllabus as it has been outlined by their supervising instructor. It is important that you familiarize yourself with the policies and procedures that the professor has outlined since you will most likely be called upon to implement them at some point. Be sure to clarify any policies which are unclear or problematic since you want to avoid a situation in which there is a discrepancy between your actions and the professor's policies. If time permits, some instructors may attempt to include the TA in the construction of the syllabus, making his or her name, office, office hours and telephone number available to students at the beginning of the quarter. This practice can be helpful in establishing rapport with students since they will know who you are and where they can find you when they have questions or need help. The TA's responsibilities as a section leader, lecturer, and grader can be outlined here as well, making students aware from the start that the TA's authority as a teacher and evaluator is supported by the faculty member teaching the course.

Dealing With Problematic Relationships

Adapted with permission from Unruh, 1986

Misunderstandings occur between TAs and professors when both take each other for granted and expect one to guess the needs and feelings of the other. One professor might want course materials brought from the library. Another might want you to come to his or her office 15 minutes before class. Professors who have worked with many TAs sometimes assume every TA knows of their wishes. And TAs who are new to a professor need to be told what is expected. Experience shows that it helps to ask specific questions: "Shall I come up before class tomorrow? Are there any handouts?"

If you have too much work or if there are problems of other kinds, it almost always helps to talk to the

professor. Let the professor know that you respect and trust him or her, and that you understand his or her situation and point of view, too. Should your relationship with a supervising faculty member become so problematic that you feel unable to address him or her directly, you must make a decision as to whether or not to bring the issue to others such as the department chairperson or a graduate committee member or chairperson. You might also consult your academic advisor for advice. In any event, you should remember that these are serious steps and you should be very certain that a situation truly warrants such measures before they are undertaken.

It may be advisable to speak to an experienced graduate student to get a sort of "second opinion" before consulting faculty members or department administrators. Duties or assignments which seem unfair or too difficult at first glance may indeed be part of the standard role for TAs in your department. Other graduate students can be a great resource for finding out what is considered "normal" in terms of TA rights and responsibilities for your department. Decisions to raise issues about faculty supervisors must always be carefully considered, especially if the faculty member in question teaches graduate courses in which you are enrolled (or may be in the future) or if he or she serves in any other role requiring evaluation of your academic or teaching performance.

PART TWO: THE TEACHING ASSISTANTSHIP (Continued)

THE TEACHING ASSISTANT AS INSTRUCTOR

Although most new teaching assistants are more anxious about surviving their first quarter than developing a philosophy of teaching, successful teaching depends as much on theory as it does on technique, and the sections in part one have attempted to address both. We have tried to offer useful suggestions on how to design a lecture or an objective test as well as start you thinking about why you are lecturing instead of leading a discussion, or giving a multiple choice test instead of an essay exam. (Adapted with permission: Farris, 1985)

Despite the potential range of techniques available to instructors, the educational experience of many beginning TAs, as well as the undergraduates they will be teaching, is likely to have been characterized by some particular styles of teaching more than others, the lecture format being the most widely used. Having had little experience participating in or facilitating discussion in classroom settings, the new TA responsible for conducting discussion sections may find him or herself lacking the skills of interactive teaching which this setting requires. Since the facilitation of discussion sections forms a part of the duties of many TAs, we encourage you to consult the sections in Part One on facilitating discussion and questioning in the classroom. (Adapted with permission from Farris, 1985)

Since the duties of teaching assistants vary from one department to the next, and often from quarter to quarter, the teaching strategies and described in Part 1 may apply more or less than others to your assignment. You might have partial responsibility in an upper division seminar, substantial responsibility for two or more laboratory or discussion sections, even full responsibility for a lower division lecture course. Lecturer, discussion leader, lab instructor, test designer, reader and grader ... all are roles you may perform at one time or another.

In your various roles as discussion leader, lab section instructor, or as a lecturer, you may have the opportunity to use a variety of different teaching styles. The choices you make will depend on what it is you wish your class to accomplish. Regardless of the particular style employed, however, the process of instruction can be understood to include three basic elements: preparation, implementation, and evaluation. Each of these has been discussed in detail above in Part 1 of the handbook which deals with general instructional techniques and we encourage you to refer to this information in planning and executing your own teaching activities.

Leading Discussion Sections

TAs are often concerned about how to encourage students to attend discussion sections. Despite the fact that section participation is a requirement for many introductory courses, students may believe that their attendance is not mandatory since the TA rather than the professor is in charge. Therefore you may want to devise a way to

structure required assignments, projects or presentations into your sections so that section participation will be a part of the final course grade. If students know that the TA has some responsibility for determining their grades, he or she will have considerably more authority in the classroom or in any interactions with students. They will also be more likely to attend section or lectures led by the TA.

Leading Discussion of a Case Analysis

In several academic disciplines, the use of case analyses is common practice in the classroom. Business, law, political science, and other studies often involve the assignment of a "case study." This case depicts a series of "real world" events and facts, usually from the perspective of an organization, which must be analyzed by students. Should you be involved in leading case analysis as a teaching assistant, it is appropriate to discuss case study discussion methods with a faculty member experienced in leading such discussions.

Leading this discussion requires the full involvement of the students. The discussion leader does not lecture, recount facts, or draw conclusions, but rather uses techniques to draw out the analysis, conclusions, and recommendations from the students. Encouraging students to discuss or debate case issues among themselves, leading them by suggestion or inquiry, are commonly used techniques as well. Writing key facts or information on the board as the students discuss the case also aids in directing the discussion. The more prepared you are as the discussion leader, the more adept you can be at focusing the discussion, bringing in key issues, and relating these to course objectives.

A useful publication for review prior to assisting in case discussion is: Christensen, C.R., *Teaching and the Case Method*. Harvard Business School, Publishing Division, 1987.

Leading Laboratory Sections

Preparing Lab Sections

Adapted with permission from Ronkowski, 1986

The most important thing you can do to ensure that your lab sections run smoothly is to be well-prepared. Your preparation, prior to the start of the quarter, should include being acquainted with the storeroom of the lab so that time won't be lost during a lab looking for necessary equipment or materials, and if applicable, knowing the location of the first aid kit, basic first aid rules, and procedures for getting emergency assistance.

Basic weekly planning for your lab section might include the following:

- **Know exactly what the students are supposed to learn and why they have to learn these things.** This may come in handy when your students start to wonder why they're doing what they're doing.
- **Perform the entire experiment in advance.** There is no guarantee it's going to work as advertised in the lab manual. By going through the lab yourself you'll be familiar with some of the stumbling blocks that your students may confront and you'll know the subtler points of the process you are demonstrating.
- **Read and study the theory on which the experiment(s) are based.** Your understanding of the theoretical aspect of the lab should be useful to you in handling most student questions which don't deal with concrete parts of the experiment(s).
- **Research the relevance of the experiment,** both the technique being taught and the applications of the theory being demonstrated.
- **Decide how to introduce the lab most effectively.** Before students get underway with the day's lab, will they need you to demonstrate the procedures that they'll be following? Is a handout with written instructions in order? Do you want two students in the class to demonstrate the experiment to the rest of the class? Will a 15-minute lecture about the theory and intent of the lab suffice? Your initial introduction to the lab or the day's first activity can set the tone and motivation for the rest of the lab.

Implementing Laboratory Sections

Adapted with permission from Farris, 1985

Labs are offered in conjunction with large lecture courses so that students may acquire technical skills and apply concepts and theories presented in lecture. This hands-on experience encourages them to develop a spirit of inquiry and allows them to live for a quarter as practicing botanists and geologists. It may sound trite, but you

really do have an opportunity to help students develop some appreciation of the mysterious scientific method.

You needn't overwhelm them with Thomas Kuhn's theory of scientific revolutions on the first day of class, of course. In fact, to realize your full potential as a laboratory instructor you'll have to recover some of the neophyte's enthusiasm for mastering fundamental principles and techniques of the discipline. Think of yourself as wearing bifocals so that you can examine a problem from the professional's and the student's points of view simultaneously.

Safety Procedures

Safety takes on special importance when you are directly responsible for the health and well-being of 25 or 30 laboratory students. Window shattering explosions are rare, but it is not uncommon for students to break beakers of acid, cut themselves while inserting glass tube into rubber stoppers, or ignite a stack of lab notes with a bunsen burner.

If your department's orientation does not cover safety procedures, the professor or lab coordinator in charge of the course will probably take responsibility for describing departmental policies. During the first few weeks of the quarter you should demonstrate to students the proper technique of decanting and mixing liquids, handling glassware, organizing a work area, and using burners and other equipment -- all of the precautionary measures you now perform almost unconsciously; your students, however, don't have your experience and will therefore appreciate your concern and advice.

Student Preparation

Those who have only a hazy recollection of Wednesday's lecture will follow directions mindlessly, but those who have reviewed lecture notes and the lab manual will have some understanding of the experiment's importance. Devise some means to ensure that students are familiar with the lab before they come to class. Some instructors feel that grades on lab reports are incentive enough, while others require students to submit a statement of purposes and procedures or an explanation of why and how the experiment is relevant to the course. Students who have no understanding of why the experiment is important will derive as much knowledge from conducting the experiment as they would from sticking a quarter in the coffee machine.

Supervising the Experiment

At the beginning of the lab, review the purposes and procedures of the experiment. You might deliver a brief but inspiring lecture on how the experiment relates to current developments in the discipline, or you might discuss the students' statements of objectives. Ask for questions, clarify any ambiguities in the lab manual, and demonstrate special procedures now rather than interrupting the experiment later.

If both you and your students are well prepared, you will be free to perform your most important role, that of guiding the students' development. Try to talk with each student at least once during the experiment. Technical and procedural matters can be handled quickly in a few words of advice or a very brief demonstration, but your primary role is to help students master the steps of scientific inquiry -- recognizing and stating a problem so that it can be explored, data collected, a hypothesis formed and tested, and a conclusion drawn.

Helping students master each step is not an easy task. You can tell students to "hold the stopper between your index and middle fingers while you're pouring," but telling them to "think better" or "remember what the professor said about that yesterday" will not be very effective. There are a variety of ways to help students solve problems for themselves. Perhaps a scaled down version of the discussion techniques described above tailored to the student and the experiment would work. Or, perhaps you'll take the opposite approach and make yourself available to ask rather than answer questions.

However you approach this part of your task, refrain from giving outright answers or advice. If lab partners ask, "Why can't we get this to come out right?" try asking them a series of questions which leads them to discover the reasons for themselves rather than simply explaining why the experiment failed. Of course sometimes the reason will be relatively simple ("You used hydrochloric instead of nitric acid."), but just as often the reason will be more substantial -- a matter of timing, sequence, proportion, or interpretation. Perhaps the student had the necessary data but has overlooked an important step in analyzing the results or is unable to synthesize a solution.

It's very tempting to help students by saying, "Aha, I see where you went wrong," but unless you resist the temptation, they are likely to falter at the same stage in the next experiment. Students may become frustrated if they can't get a straight answer out of you, but they will also learn more.

PART TWO: THE TEACHING ASSISTANTSHIP (Continued)

THE TEACHING ASSISTANT AS EVALUATOR

Adapted with permission from Farris, 1985

Most TAs have some responsibility for grading student performance (weekly quizzes or essays, midterm or final examinations, lab reports or term papers) and those with considerable autonomy often assign final quarterly grades as well. It is important, then, that you develop a sense of academic standards as quickly as possible, explain them clearly at the beginning of the course, and apply them consistently throughout the quarter. However, as you know from your experience as a student, grading practices vary considerably from one instructor to the next. Thus, it is wise to be sure of the expectations of the professor you work with when it comes to evaluating student work.

It will probably take a quarter for you to strike a comfortable balance between the "I'm tough -- learn because you respect me" and the "I'm compassionate -- learn because you love me" extremes of motivating students. Regardless of the approach you take, students will not respect you or your standards unless you also provide them with a means of meeting your expectations.

The material presented above on responding to student writing and grading strategies in general should be helpful in your first experiences as an evaluator of student performance.

PART TWO: THE TEACHING ASSISTANTSHIP (Continued)

INTERNATIONAL TEACHING ASSISTANTS

Cultural differences in the classroom

Adapted with permission from Unruh, 1986

Cultural differences in teaching methods and appropriate conduct for students and teachers create challenges for the international TA beyond those encountered by the American TA. In all countries, teachers are respected as authority figures, but the way an authority figure behaves differs from country to country. At American universities, teachers may expect more independent work from students than do teachers in many other cultures. There is a difference in emphasis on how much teachers tell their students and how much they encourage students to learn on their own. This affects the kind of homework, the type and extent of classroom discussion, and the style of papers and examinations that teachers and students expect. Reconciling these expectations with experiences at home is an example of the additional challenge faced by international TAs.

Teacher and student behavior in the classroom is also culturally influenced. There are subtle distinctions in the form and quality of posture and body movements, spacing and timing, eye contact, smile and head nod. If all teachers in your country sit tall and straight behind their desks, without looking, smiling, or nodding at individual students, you will tend to do the same. Whether you look or smile at your students while teaching, use few or many gestures, stand or sit behind a podium or desk affects how your students perceive you as a teacher and how effectively they learn. We tend to ignore these aspects of teaching, and tend to overlook how profoundly these actions affect our liking and respect for another and influence the quality and quantity of teaching and learning that occurs in the classroom. Following are some suggestions for improving the social

relationships of international TAs with their students. (Adapted with permission from Mahdi, Useem, and Ewens, American Sociological Association, 1987).

Teaching Tips for International TAs

Adapted from Mahdi, et. al., American Sociological Association, 1987

Handling Anxieties. Common among international students, just appointed to assist in teaching, are anxieties and insecurities. After all, these feelings of uncertainty are commonly felt even by native graduate TAs who are experiencing less general culture shock. One may feel uneasy, for instance, about going into a class whose students speak another language and have a different culture. The best one can do in this situation is to attempt to overcome these fears and try to build up one's own natural self-confidence. Remember that you are not the only one who is going to face this situation. Many others have had this experience and have actually come out of it alive!

Foreign is beautiful. When you enter the classroom, consider yourself a graduate assistant and not a "foreign graduate assistant." While it is important to introduce your nationality, educational and cultural background, it is not wise, in many cases, to act as a foreigner. Thus, one should not present oneself in a way that leads students to believe that you are "handicapped" or "different," which may, therefore, elicit a sense of pity from the students and impair your rapport with the class. By all means, be yourself, but it is often not constructive to give your students the impression that you are less than a capable and competent teacher because you are an international student. Try to meet the expectations of the course to the best of your ability, but let your nationality or cultural distinctiveness work for you rather than against you.

Ignore student prejudices. Try to suspend your biases, prejudices, and stereotypes, if you have any, about American undergraduate students. While racist and sexist views can, unfortunately, surface among American students, you should not assume that all share these views. Interaction formed on the basis of stereotypes, on your part, or on the part of your students, can lead to a great deal of misunderstanding, suspicion, apprehension, and conflict.

Talk to friends. In handling discussion, grading exams, reading papers, making tests, designing classroom activities, and so on, you may encounter some difficulties. In these situations, consult other TAs or friends. Instead of hiding problems, you should try to resolve them as soon as possible. It is wisest to discuss the problem first with your peers and colleagues in a "give-and-take" situation. Cooperation and consultation are very important aspects of teaching. If the problem is not solved and there is a need for further cooperation, you should then discuss the issue with the professor with whom you are working. It is not wise to hide issues and problems from the professor. It is easier and more constructive to have the instructor involved and informed about the problems from the beginning, not only because the professor may be helpful, but also because problems may come to the surface in a way that could be disruptive to the whole course.

Anticipate potential student problems. If you are assigned to the task of running a discussion or dealing with students directly, you may find it helpful to be aware of some of the following potential problems.

If you are assigned to run a discussion or give a lecture, you may find it helpful to develop a systematic outline of your lecture or the main issues and questions to be discussed. Once you have done this, try to organize the outline as clearly, neatly, and summarily as possible because then you can put this on the chalkboard or distribute it as a handout in class. When you have an outline on the board, the direction of your discussion will be more clearly organized. When the headings are available on the board, and the connections are established in charts or formulas, there is less risk of going off on tangents. Furthermore, since the information is sitting clearly in front of the class, there is less of a chance of allowing the critical and challenging questions of students to loosen your control over the learning process. For example, having this outline prevents the unnecessary search into your notes and eliminates some of the conditions which might lead to a breakdown of the class discussion.

When lecturing or leading discussion, try to make your arguments as concrete as possible by using examples from everyday life. However, since you are an international student, you may have a tendency to use more examples from your own culture. This is fine, as long as you realize the cultural heterogeneity of the class and provide the students with enough background to understand your examples. This is especially important when you use foreign jokes, slang, and expressions. Also remember that the use of too many examples from one specific foreign culture may make the students bored and disinterested. Try to diversify your examples and

expand the scope of your topics of discussion.

If you disagree with testing or grading procedures set by the professor and cannot convince the instructor to change them, then make it subtly clear to students that the evaluation framework has been constructed solely by the professor. Many times, if a test is difficult and the students are doing poorly, some may try to find an external factor to blame. Since you are an international student, you have a good chance of being that external factor. Statements like, "Foreign students should not grade the test," "Foreign students are not capable of testing my ability," or, "He does not know how to speak; how does he have a right to judge my paper?" are not uncommon.

To minimize language difficulties, avoid using words or terms that are hard to pronounce. If you are unsure of a pronunciation, check with the professor or a peer before class. Writing the word on the board will ensure that students understand your meaning. Sometimes when students are asking questions or making comments, they may use words with which you are not familiar. As long as you can get a correct interpretation of what is being asked or said, you do not have to worry about it. However, if you are not sure of the meaning of what is said, do not hesitate to ask for further clarification or the specific meaning of the term. At times you may use a word in a specific way and feel that the students do not understand your point because of the specific meaning you have attached to a term. Words may have different meanings in different contexts, some of which you may be unaware. In these situations, do not insist on the only meaning you know. Do not take the student's questions on the matter as an attack on your knowledge and teaching competency. Try to be open-minded and attempt to establish a dialogue in exploring different meanings of the term and aspects of the issue. Admitting your uncertainty can demonstrate openness and a willingness to learn from students.

When you are assigned to the task of grading papers or exams, make sure your comments and criticisms are well-structured and accurately organized. Some students look for every opportunity to increase their grades, and may seize upon your grammatical mistakes to embarrass you into changing their grade. Make sure everything you write for students and every handout you give them is structurally checked in advance and does not contain any grammatical flaws.

Improving interpersonal relations. In many foreign cultures, less emphasis is placed on interpersonal relations between teachers and students. Some things which can be done to strengthen social relations with students are the following:

- Invite members of the section to stay after class to discuss points made in class, rather than leaving immediately after class.
- Select one or two thoughtful members of the section, and after class say, "Now let's talk about what I was trying to get at in the section," or, "What could I have done differently?" or, "What did you get out of it?" Try to get an informal discussion going and solicit feedback on your performance.
- Construct a brief biographical questionnaire and have each member of the class fill it out, in order to find out more about class members. For example, you might ask, "What brought you to the class?" or "What is your background?" etc.

PART TWO: THE TEACHING ASSISTANTSHIP (Continued)

THE TA: PREPARATION FOR COLLEGE TEACHING

Adapted with permission from Ewens, American Sociological Association, 1976

Many graduate students continue to obtain teaching jobs in higher education without worrying too much about demonstrating to potential employers their overall teaching competence. It may be argued, however, that through systematic and rational planning you are much more likely to impress potential employers with your teaching abilities. Below are described some methods and techniques that you might use in planning your teaching preparation program.

As compared with research scholarship which is generally considered to be a public activity leading to written materials such as journal articles or research monographs, teaching is often looked upon as a private affair between oneself and one's students. And given the press of events, we often do not write down descriptions of the teaching methods or techniques that we attempt in the classroom or go to the extra trouble of having these methods or techniques evaluated by others.

If you are a teaching assistant or have other teaching related experience, keep a file in which you write down descriptions of all of these teaching activities. It is easy to forget many of the things that one does in the classroom, so write down descriptions of the duties you perform, the teaching exercises and techniques you employ in your discussion sections, your techniques for grading essay exams and papers, outlines of the lectures that you give, and so forth. Also keep in your files syllabi, exams, and other written material from these courses. These files will be useful for planning your teaching program as a graduate student, for helping job references write good letters of recommendation for you, for writing your job vita, and for organizing your job interview.

Also, put into this file any evaluations by others concerning your teaching effectiveness. This might include reaction by students in your discussion groups, written evaluations concerning your teaching by faculty members or administrators, or evaluations by other graduate students. This gives you good feedback which may be useful in improving your teaching skills; it also provides a written record of your abilities for demonstrating to potential employers your capabilities as a college teacher.

If possible, plan your teaching assignments in graduate school as carefully as you plan your academic program. Make sure you have a variety of teaching experiences in a number of types of courses. Particularly important for most students is to have some experience in broad survey courses that most new faculty members will be asked to teach, and also courses in your special area of interest. Also select courses which expose you to a variety of teaching methods and teaching styles. Finally, it is important to choose teaching assignments so that you get practice assisting students individually, conducting discussions, lecturing, and all of the other specific tasks that you are likely to perform as a college teacher.

It is important to be able to demonstrate to others your professional commitment to teaching in your discipline. You might, for instance, consider joining the national professional organization within your field, or participate in the activities of local or regional organizations, many of which have special sections devoted to teaching issues.

Finally, make sure and keep records of any teacher training activities in which you engage. This might include education courses, workshops and seminars on education off-campus or sponsored by other units within the university, or department sponsored teacher preparation activities. Again, memory is a tricky thing so you should keep a file of written materials related to these events and write down descriptions of the things you do and learn through these activities.

PART TWO: THE TEACHING ASSISTANTSHIP (Continued)

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PART TWO: THE TEACHING ASSISTANTSHIP (Continued)

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