One of the most challenging teaching tasks in the university is providing effective instruction in introductory-level courses. Members of the Study Group sponsored by the National Institute of Education recognized this challenge when they recommended that “deans and department chairs ... assign as many of their finest instructors as possible to classes attracting large numbers of first-year students” (1984). If teaching the introductory course is a special case, what makes it so and how can college teachers vary their teaching methods to meet this challenge? This article describes some of the special qualities associated with teaching introductory-level courses and suggests some instructional strategies which can be used in addressing the special needs of beginning students in a discipline.

Teachers at all levels go through some process of course planning or instructional design. It has been estimated that teachers make 1300 decisions a day having to do with the subject, the students, and the instruction in their courses (Costa and Garmston, 1985). In planning and making decisions, college teachers need to take into account such elements as student characteristics, specific topics in the subject matter, levels of thinking required of students, constraints and opportunities provided by the physical surroundings and equipment, as well as their own teaching philosophies, styles, and skills.
This paper discusses three areas which are important to consider in designing instruction for the introductory course. They are: (1) the nature of the subject matter, (2) the characteristics of beginning students, and (3) the environment of the academic community.

SUBJECT MATTER IN INTRODUCTORY COURSES

One major difference between introductory-level courses and others in the discipline is found in the subject matter itself. Specifically what information is included in what depth or breadth as well as other selected skills, attitudes or values may differ appreciably.

1. Subject Matter Selection. Content in an introductory-level course may serve a variety of purposes within the curriculum. These purposes establish the nature and depth of subject matter selected by the professor. For example, one course may be used to attract future majors while others may serve to develop prerequisite knowledge, skills or attitudes for future courses in the field. Still other introductory courses represent components of a general liberal education which emphasize general awareness, appreciations and societal relevance. Since every course, of necessity, is a sampling of content from a field, the purpose within the curriculum points the way to limiting what that selection should be.

2. Breadth versus Depth. Each professor has great autonomy in determining not only what topics to include, but the degree of breadth or depth of each of these. If a foundation of a broad array of facts, principles, concepts and vocabulary is important, then little depth may be required. On the other hand, if one wishes to convey "ways of knowing" in the field, a single inquiry in great detail and depth may be a better choice. Professional decisions must be made about the relative merits of such choices.

3. Levels of Thinking. An introductory treatment of any subject matter typically requires little beyond memorization, recall and simple comprehension on the part of students. While concepts or principles being memorized may be complicated in themselves, learners need to use little reasoning ability. A course with the purpose of developing reasoning skills must incorporate activities which also require the student to apply
the memorized ideas to new situations, to analyze issues or problems in the field, to synthesize new plans or explanations or to use standards to judge the qualitative aspects of an illustration. Writing assignments or problem solving tasks can be used as devices for requiring students to exercise these more complex thinking processes.

4. **Attitudes and Values.** While the development of attitudes, values and appreciations are especially important in the general education course, every field has equally useful affective responses. These might include attention to detail and careful observation in the sciences, a sensitivity to original expression in humanities, or a valuing of diversity among people in the social sciences. Introductory courses may provide the only opportunity for a teacher to engender positive relevant attitudes for a given subject. When the occasion arises, the professor can model these responses as well as draw upon illustrations which demonstrate expressions of attitudes or values. Simulations, role playing and interviewing activities can contribute to the development of affective learning. One of the consistently powerful ways to develop student attitudes is the expression of enthusiasm by the professor about new ideas and insights.

5. **Assessment of Student Performance.** The determination of how well students perform is directly related to decisions regarding the purpose of the course, its role in the curriculum and the kinds of thinking a student should be able to demonstrate. At issue is not whether essay tests or multiple-choice tests are utilized; but rather what is the best way to determine whether a student can demonstrate the kinds of thinking about the subject which were targeted. Maybe an essay is useful for tracking the student’s line of analytical thought, but perhaps a short-answer or multiple choice can better sample comprehension of a large variety of ideas, principles, concepts and applications.

Since introductory students do represent wide variations in capability and sophistication, use of preassessments are particularly useful. These allow adjustments which can better utilize time for those topics not already understood, or for greater depth of study. Preassessments allow the most efficient plan while postassessments confirm how well students do after instruction and whether they have mastered prerequisites for
continuation. Both together allow assessment of how much the instruction has contributed to student growth.

BEGINNING STUDENTS

A major concern for teachers must be for the great heterogeneity among students in their introductory courses. Some of the differences include:

1. Background and Experiences. Students may or may not have had high school courses in the subject matter. Other elements such as previous reading, travel, work, age, demographic variation, parental attitudes, and values will affect the degree to which students are responsive in class. Teachers need to capitalize on the experiences of some without forming unfair biases against others.

One of the difficult tasks of the professor is to see the subject matter from the perspective of the entering student. It is necessary for a teacher to have a substantial margin of knowledge beyond that of the student. This fact, however, may make it difficult to see why students may have difficulty. Some phrases helpful to point out the direction students are to move include: “The first issue is . . .”, or “Let’s review for a moment . . .”

Learning also takes place when new ideas or concepts are related to prior experience and knowledge. Material can be clearly connected to what the students see as personally or socially relevant.

Beginning students are often reluctant to participate in an overt way. Therefore providing an encouraging atmosphere, free of negative criticism or sarcasm, is essential in allowing them to examine and debate concepts. The teacher’s own enthusiasm goes a long way in establishing an atmosphere where students will participate. Passive behavior requires that the teacher be alert to feedback cues—facial expression, eye contact, comments—which indicate the degree students are following or are involved in the learning process.

2. Capacity. Learning aptitude represents a basic variable in academic success. Any class represents a considerable range of capability among students. Every student, however, can be moved toward more learning. The challenge is to stimulate the most capable as well as not exceeding frustration levels
for the less able student.

Although *repeating materials* sounds boring, one time through materials is not enough. The teacher needs to give the students at least three opportunities to learn each concept, at least once in the class period and at other times by readings, exercises or reiteration.

3. **Stages of Intellectual Development.** Entering students, especially those of traditional college age, display a much greater variety in stages of intellectual development which causes them to respond in a variety of ways. They may be oriented to a demand for “black or white” truths; they may see all ideas “as good as all others;” or they may see “all things as relative to all other things and nothing is certain” (Perry, 1981). Ways students perceive the world result in differences in how they view learning the subject and will be reflected in their responses to all aspects of the course. If the professor can accept the students’ levels of development and nudge them toward recognition of the relativity of knowledge, progress can be made. This variable can sometimes account for what appear to the teacher to be unreasonable demands as well as inconsistencies in course evaluations.

4. **Learning Styles.** Every introductory class represents a great variety of ways individuals incorporate new information into their own thinking. This variable accounts for the fact that some students prefer lecture while others prefer discussion; some learn better visually while others need aural input; some need first-hand experiences while others prefer to read about the behavior; some need to work alone while others need interaction with peers; some learn better inductively while others do better deductively; some automatically organize and structure everything while others need to have an organization suggested. The list could go on; however, this diversity suggests that teaching using a variety of approaches is most likely to be successful when coping with such a variety of learners. This diversity may diminish as one works only with those self-selected by major field of study in upper level courses.

5. **Motivation.** Why different students are moved to action may be explained by differing sources and degrees of motivation. Students in entry courses may range from those who would really prefer not to be there at all to those who are internally committed to performing excellently in that discipline.
Teachers who display enthusiasm and make an effort to reach students as individuals often can create a more positive attitude toward the subject.

A significant challenge in all entry courses is to bring students to the excitement and satisfaction possible from study and involvement with the subject matter. Teaching at this level can provide the reward of seeing beginning students select the discipline as their major field. If the motivation of beginning students is not addressed, it also can carry the risk of discouraging a student from finding any value in the subject at all.

6. Expectations. Students' views about what is a reasonable expectation for their performance are greatly affected by their past experiences. Secondary education has widely varying standards for rigor as well as volume of work expected. When student expectations are at variance from professor expectations, the quality of learning can be impeded. Making expectations explicit in a detailed, well-structured syllabus is especially needed at this level. It should be clear about what will be assigned when and exactly what they are to do. As students mature intellectually, they will do better with less structure; however, initially they need defined guides.

Verbal explanations of organization are especially important. Telling students what they are going to learn at the beginning of a class and how it relates to previous sessions as well as summarizing at the end of the period are essential to providing the context for learning. Using organizing phrases are also helpful such as: "... now that we have studied the general principle, let's look at three specific applications of it."

7. Study Skills. Prior experience and expectation may also determine how efficiently and effectively students operate as learners. It is obvious that skills in reading comprehension and speed as well as fundamental ability to manipulate numerical values and express oneself orally or in writing are essential. Other important skills include managing time, note-taking, organizing ideas for study, accessing library resources, and reducing test anxiety. Professors can provide study tips to students; they can spot-check notes to see how well students are gathering important ideas and organizing them. Asking for schedules with identified study times can be helpful or assigning a successful former student to conduct sessions on how to study this subject can be used. Referral to professional
staff who provide individualized study skill assistance may be an option.

ENVIRONMENT OF THE ACADEMIC COMMUNITY

Since introductory courses often represent a student's first experience with academe, it is an important time to establish attitudes about this particular institution, the academic environment, and learning itself.

Entering freshmen often express feelings of isolation, loneliness, or stress in their new environment. Instructional activities which require getting acquainted with some other members of the class can be constructive. Providing opportunities to talk in class as well as work together in groups on assignments can further both intellectual and social goals. Techniques for the teacher to learn and use students' names are well worth the effort for communicating that students are valued as individuals. Even special care to smile and communicate openness is important in working with these new students. Explicitly telling students they are an important part of the academic community may raise their self-esteem.

Professors in these classes are key to providing examples or models of the academic life. Students at this point are not only looking for ways of behaving in the university community, but they are also open to establishing expectations for themselves. What constitutes an educated person and how this course contributes to that end need to be addressed. They can encourage students to participate in other campus opportunities to integrate subject matter into real life experiences.

College teachers can draw beginners into the academic community by demonstrating the methods of the discipline and making its assumptions explicit, by modeling attitudes toward the subject matter and learning, and by personalizing their approaches to teaching and learning.

CONCLUSION

The most effective teaching strategies take into account both the nature of the subject matter and that of the students. Whether the class is large or small, beginning students need support in learning materials and becoming members of the academic community.
Many times introductory courses are assigned to less-experienced teachers. While it is true that the level of subject matter expertise demands breadth more than depth, the complexity of decisions about teaching strategies makes this a very difficult assignment. A faculty member who is assigned the task of planning and implementing instruction for beginning students in introductory-level courses needs incentives, recognition, support, and resources to teach these students in the best way possible.

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