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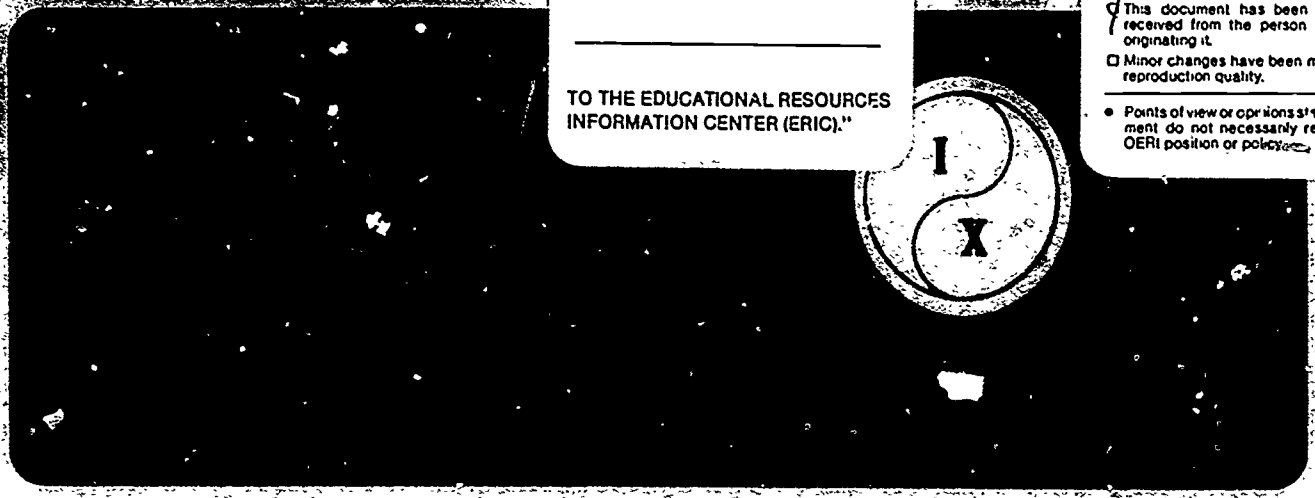
ABSTRACT

The six editions of the newsletter provide a forum for the sharing of research findings and instructional strategies by faculty of Western Michigan University. Topics addressed include: active learning; lecture variations; lecture techniques; grading student participation; leading discussions; overcoming silence; discussion challenges; course planning; setting expectations; the first day of class; communicating course components; the syllabus planning checklist; rationale for a syllabus; the PASS computerized system for tutoring and testing students; guidelines for demonstrating PASS; and getting started with PASS. References accompany most articles. (DB)



Newsletter Provides Forum for Exchange

Welcome to the first issue of Instructional Exchange -- a newsletter for the exchange of information about instructional strategies among the faculty of Western Michigan University. The purpose of Instructional Exchange (*I/X*) is to enhance the teaching process through information and discussion.

Western Michigan University faculty have historically been intensely interested in the teaching and learning process. Current discussions on campus of the research enterprise and the introduction of vehicles which promote research have lead some to believe that teaching is no longer given the status it deserves. Instructional Exchange hopes to provide a springboard to discussion by publishing current research findings, information on innovative faculty practice on campus, and an exchange of views on instructional practices. The newsletter will be published 3 times per semester, with a variety or topics in the areas of instruction and testing.

As you read through the newsletter, you may want to express your viewpoint on a specific topic, or there may be topics that you would like to have covered in an issue of the newsletter. If so, you can communicate with the *I/X* staff by contacting University Assessment (Mary Anne Bunda) by phone (387-303.) or campus mail, or you may use electronic mail on the VAX to send messages to BUNDA.

Involvement, Expectations, Assessment

In 1984, a seven-member Study Group of the Conditions of Excellence in American Higher Education published a national report entitled, Involvement in Learning. In this publication, three specific conditions necessary for effective learning in postsecondary education were identified as:

- student involvement in the learning process
- high, realistic expectations for students
- regular and periodic assessment, and the use of assessment to redirect effort

Since this report, these three conditions have been reaffirmed in regional conferences where much energy has gone into the discussion of strategies and means of achieving these conditions. In this first issue of Instructional Exchange, the topic of student involvement will be highlighted. These 3 conditions will serve as the organizers for this year's newsletters.

Active Learning .... What is it?

Student involvement in learning has also been called active learning or experiential learning. In this type of learning, students are required to actively engage in a process of learning rather than to passively accept knowledge.

Active learning is brought about by "active modes of teaching," i.e., modes that require students to take responsibility for their own learning and that preclude student passivity. John Centra (1986) described a continuum of teaching methods, from teacher-activity to more student-activity with the following examples:

- lecture, films, slides
- lecture/discussion/questioning/Socratic method
- seminars, case studies
- simulating and gaming, role playing, debating
- individualized instruction, supervised independent study, laboratory work
- unsupervised independent study, student research, independent field work

Active learning follows the wisdom of the Chinese proverb:

> I hear, and I forget
> I see, and I remember
> I do, and I understand.

If active learning is the means of achieving understanding, why is the lecture method the predominant teaching method used in higher education? Why do 83% of all faculty list the lecture as their instructional method of choice?

There are several myths that deter the implementation of active teaching methods. Myth 1: Students are not prepared for and not responsive to active learning activities. Students prefer receiving knowledge through textbooks and lectures. Myth 2: Active teaching strategies do not lend themselves to certain subject areas or to large classes. Myth 3: Active teaching means abdicating responsibility for student learning.

Active Teaching .... Myths

MYTH 1. Students are not prepared for and not responsive to active teaching methods.

There is some evidence that older students prefer the traditional lecture method of learning to active learning methods. There is overwhelming evidence that undergraduate students are rarely given the opportunity to engage in active learning. Large lecture classes, which require memorization and regurgitation of facts are far more common than case studies, student research, or field investigation. Comments from students: "While the student may initially moan and groan at having to try something new and unfamiliar, the experience of working on such an assignment and the ultimate sense of achievement when it is completed will stimulate the thinking process and and student involvement more than any lecture." "Institutions should consider requiring students to include a research methods course in their freshman year of college....Research is central to continued involvement in the pursuit of knowledge."

MYTH 2. Active learning strategies do not lend themselves to certain subjects or large classes.

Examples of active teaching strategies across a variety of subject areas are given on the EXCHANGE BOARD (see page 4) Large class strategies have been discussed by several authors, which are also referenced. The topic of active learning strategies for large classes -- because of its importance and broad applicability -- will be highlighted in subsequent issues of *I/X*.

MYTH 3. Active teaching means abdicating responsibility for student learning.

There are times when "active teaching" is, in fact, "not teaching." Blind application of active learning techniques does not guarantee that active learning will take place. Discussion groups that are not focused, case studies that are "cookbook-fashion," or writing assignments that require no student engagement do not achieve active lerning results. In order to be effective, the techniques must be carefully fit to learning objectives specific to the course; continuous evaluation of "what works" is critical.

Active Teaching .... Examples

Examples of active learning exist in a variety of fields, where instructors have developed classroom methods that require student participation and engagement with the material. Several sources are cited on page 4, that provide examples of active teaching strategies by course type.

Some active teaching tips that cut across disciplines are:

1. Writing can encourage the engagement of the students in problem solving behaviors Students writing a translation of new ideas in their own words, articulating relationships between ideas, and integrating new information with prior knowledge are examples of active learning through writing. Writing will be more successfully completed when the instructor reads the rewrite after the students read the draft and critique it.

2. Working in groups exposes students to different approaches and perspectives which can be used to stimulate students' abilities to articulate their own views and knowledge.

When groups are instructed to compare individual responses to assigned work, the instructor can ask students to consider what the responses have in common and how they differ. This approach demonstrates an appreciation of genuine differences and begins to wean students from the expectation of a "right" answer. Task-oriented, conflict resolution and negotiation of consensus can be valuable byproducts of the group work and a viable alternative to "right" answers.

3. When introducing a new concept, allow students 5 minutes to define the concept in their own words. Then arrange the class into small groups to compare definitions and to prepare final group definitions for presentation to the class. Additionally, the groups might invent an illustration of the concept.

4. Take time near the end of the session to have students write and present a summary of what was presented or learned during the class. The summaries can be done individually or in small groups, and may be written or oral.

Testing Tips

The conflict situation of test construction and grading is classic: essay examinations which are easy to construct are difficult to grade; multiple choice exams which are easy to grade, are difficult to construct. Short answer examinations items fall somewhere between essay and multiple choice in both construction ease and grading time.

Whichever type of test is chosen, instructions to students need to be specific. Students will want to know: Is there a penalty for guessing? a time limit? Should they quote sources? Here are a few tips for the administration of tests.

When administering multiple choice tests, emphasize in the test introduction that the student should choose THE best answer. This action on your part may prevent lengthy discussions concerning remote instances in which the correct alternative might be wrong. A good morale builder for a multiple choice test is to spend a few minutes before the test telling students how to take a multiple choice test (McKeachie,1986). Remind them that they should go through the examination the first time and answer all of the questions they can. On the second run through, answer any questions that now seem obvious. On the third reading of questions they have not yet answered, they should eliminate the item choices they know are incorrect. Now, when they guess, the odds are more in their favor.

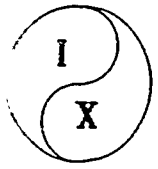
Essay test administration tips include giving students instructions concerning your mechanical requirements for their writing (your pet peeves). If you want them to use blue books for their exam, tell them. Before the students begin the exam, give them the answers to the following questions:

Are all items equally weighted?
Does spelling count?
Does sentence structure count?
Should examples be used to illustrate a point?

McKeachie (1986) in his instructions to students for essays encourages them to "outline your answer before writing it. This provides a check against the common error of omitting completely one part of the answer. If a question completely baffles you, start

Continued on page 4 .....

Symbolically Speaking



The egg-symbol of the yin and the yang originated in ancient Chinese religions to depict the nature of "maleness" and "femaleness." Yin and yang symbolizes the necessary, complementary, and interdependent relationship of two seeming opposites. The combination of yin and yang produces all that comes into being.

As a logo for the Instructional Exchange, the egg symbol is meant to represent a number of "opposites," i.e., instruction and research, teaching and learning, testing and instructing, that play a role in an instructor's day-to-day performance. The combination of the activities produces wholeness.

Testing Tips .....continued from page 3

writing on the back of your paper anything you know that could possibly be relevant. This starts your memory functioning and usually you'll soon find that you have some relevant ideas".

If you give students a choice of questions to answer, make sure you are clear about how many selections they are to make. If the number of selections that you require is not stated on the exam itself, write your requirement on the board.

Finally, without rushing students, try to keep them aware of their time. Budgeting time on an essay exam if very difficult to learn. Your prompts reminding them of how much time they have left will help them budget their time more effectively.

EXCHANGE BOARD

A variety of resources for active learning strategies exist in a number of discipline areas. The following articles are provided as examples, but do not represent the only or best resource.

SCIENCE: Lawson, A. & Renner, J. (1975) Piagetian Theory and Biology Teaching. The American Biology Teacher, 37,336-343.

ENGINEERING: Hayes-Roth, Frederick. (1984) The Machine as Partner of the New Professional. IEEE Spectrum: Journal of the Institute of Electrical and Electronics Engineers, 21, 2831.

SOCIOLOGY: Mayer, J. (1986). Teaching critical awareness in an introductory course. Teaching Sociology, 12 (4), 248-256.

BUSINESS. Specht, P.H. (1985) Experimental learning-based vs. lecture-based discussion: the impact of detree of participation and student characteristics on comprehension and retention. Journal of Business Education, 60, 283-87.

MUSIC: Pogonowski, L. (1987) Develcping skills in Critical Thinking and Problem Solving. Music Educators Journal, 73, (6), 37-41.

References this issue:
Centra, John (1986). From Reports to Response. OERI Publication. page 4.

McKeachie, W.J. (1986). Teaching Tips: A guidebook for the beginning college teacher. Lexington, MA: D.C. Heath and Co.

Instructional Exchange is published by the offices of Instructional Development and University Assessment of Western Michigan University during the fall and winter semesters. For further information about the newsletter, phone 387-3031.

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Instructional Exchange

I X

Lecture Variations -- Toward Active Learning

The lecture has been the primary medium of college and university instruction since the middle ages. Although in recent years the lecture has been attacked by educators as well as students, it continues to dominate classroom techniques. There are many reasons for the popularity of the lecture. The ideal lecture can model the lecturer's creative mind at work, analyze and show relationships among seemingly unconnected information, and inspire and motivate students to higher levels of learning. In its highest form, the lecture seeks to engage students in intense "internal dialogue" (Bergman, 1983).

However, all lectures do not meet these ideals. Research studies suggest that the lecture is a less effective method than others when instructional goals involve information application, thinking skill development, or the modification of attitudes. Instructors struggle to balance the pros and cons of lecturing in classes of all disciplines and sizes. Perhaps a complete withdrawal from lecturing methods is too harsh a strategy, but there are variations on the lecture that can be adapted to a variety of settings. The following eight variations on the lecture method were developed and described by Frederick (1986).

1. The exquisite oral essay is a polished delivery of a single topic that conveys substantive information and demonstrates the skill of professing. This is the masterful execution of the traditional lecture.

2. The participatory lecture invites students to create the lecture inside the class time. In this lecture, an orderly brainstorming session is followed by organization of the generated ideas into patterns or schema. The use of the blackboard, overhead projector, or flip chart to record and organize the information facilitates visual learning.

3. Demonstrations, proofs, and stories begin with a paradox or puzzle that unfolds and reaches solution within the class time. The process of unfolding can be managed through lecture or through an interactive discussion of key questions.

4. Alternating lectures and mini-discussions within a period recognizes the 20 minute attention span of most listeners. The feedback obtained by the mini-discussions can provide excellent information about gaps in knowledge or misconceptions.

5. Modeling analysis skills by reading and analyzing a passage of text is an "old-fashioned" method of instruction. The method can be expanded to include the analysis of musical compositions, graphs, works of art, or computer printouts. To be successful, all students must have access to the document of discussion, and the class should follow the format of MODEL, PRACTICE, FEEDBACK.

.....continued on page 2

Contents

Lecture Variations

...continued from p1

6. Debates can be used even in very large classes to achieve student involvement without losing control of the activities. Two or three sides of an argument can be managed through five minute presentations of each side, followed by rebuttals and final summary statements.

7. Simulations and role playing start with a short lecture that describes the context of the situation. The class is then divided into groups to carry out specific tasks. Group products are presented, and a final debriefing identifies what was learned.

8. Emotional media lectures make use of audio-visual techniques to elicit affective learning in students. Thes media can be used to elicit discussions, or to conclude classes in a powerful and thought-provoking way.

These eight variations provide some thoughts on bringing more student-centered learning into the classroom. For further explanation of these suggestions and examples of their use, read "The Lively Lecture" by Peter J. Frederick in College Teaching (vol. 34, no. 2).

About Instructional Exchange

Instructional Exchange (I/X) is published six times per year during the fall and winter semesters. The purpose of I/X is to provide a forum for the exchange of information about instruction at Western Michigan University.

The newsletter is published jointly by the offices of University Assessment and Instructional Development. Comments and exchanges can be directed to the I/X staff at University Assessment or through the VAX system addressed to BUNDA.

Editors:
Sharon Dodson and Rebecca Thomas

"How To" Lecture Tips

Lecturing (or a variation thereof) is particularly appropriate for helping students get up-to-date information on relevant research and theories, summarizing materials scattered over a large number of printed sources, and for adapting material to the backgrounds and interests of a particular audience. Eble (1988) offers concrete suggestions in his book, The Craft of Teaching on "how to" lecture effectively. Other studies, summarized by Rosenshine (1983) also suggest that there are methods that can increase the effectiveness of a lecture session.

Suggestions include:

* As preparation, make an outline of the topics that will be covered. This outline should serve to guide the lecture, but should not preclude improvisation based on class feedback. In many instances it will be necessary to adjust the lecture to accommodate the needs of the class.

* Plan to present no more than five major points in any one session. Points should be sequenced so that each one is mastered before the next one is introduced.

* Provide an overview of the lecture at the beginning of the class. By giving students a map for the lecture, they can concentrate more on the material presented. This overview can be written on the board, supplied in a handout, or shown on an overhead, but should be in written form.

  McKeachie suggests that the "organizing principles" of the lecture should be identified. If the lecture is organized by time sequence, cause-to-effect, concept-to-application, or problem-to-solution, the student should understand how the material is being presented. An overview of concepts plus the principles provide the learner with advanced context knowledge. Information on the extent to which the lecture is supplementary to the text is also helpful to the student.

* Start the lecture by engaging the audience. This may be done by alluding to the outside or personal world, arousing curiosity through a question or dilemma, or using casual humor (if this is something you are comfortable with).

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Tips .....continued from previous column

* **Use precise, varied, and detailed examples and illustrations** during the lecture. Since students generally have varied backgrounds and interests, a variety of examples serves to pull more students into the lecture than would a single example. Providing sufficient detail in the examples is necessary for students to understand the principles that are demonstrated in the example. Students can be engaged in the lecture by asking them to provide unique examples to illustrate the lecture points.

* **Use a variety of presentation techniques.** Facial expressions, voice volume and pitch, and posture can be varied to avoid monotony for the audience. Be careful to avoid mannerisms and affectations that distract rather than stimulate the audience.

* **Provide redundant explanation for difficult points.** Repetition is necessary for learning, especially when LISTENING is the mode of information transfer. Check that a point is understood before proceeding to the next point. Redundant contrasts between two conflicting authorities are especially important in conveying an overall understanding of context.

* **Provide many breathing spaces or question periods** throughout the lecture to clear up student misunderstandings and to allow for the students to fit new learning into old. Suggestions of resources which supplement the text and lecture may be provided during these periods, so that students are able to locate additional material when needed.

* **Pay attention to the audience.** Attempt to engage as many as possible by asking questions, by having the audience produce examples of a point, or by having students develop a structured practice activity.

Eble cites as major impediments to effective lecturing: **poor delivery skills** (lack of contact with the audience, monotonous vocal tone, fixed posture, and repeated hesitations in delivery); **preoccupations** (with historical background, trivial points, arcane terms, or appeals to expert authority); and **lack of context** (either by way of introduction, or in describing the relationship of the subject to present context or broader subjects.)

Grading Participation

Do you grade class participation? How much does it count?

How much does class participation count as part of the grade? If participation does count, how is it assessed? Valid, objective, meaningful measurement of class participation is a challenge for instructors who choose to include participation in the calculation of student grades.

Grading criteria must be operationally defined, communicated to all students, and reinforced to be effective (Lyons, 1989). One approach to operationally defining the criteria involves the use of BARS (behaviorally anchored rating scales). This scale, originally developed by Smith and Kendall (1963) as a performance assessment tool, can be readily adapted to this application.

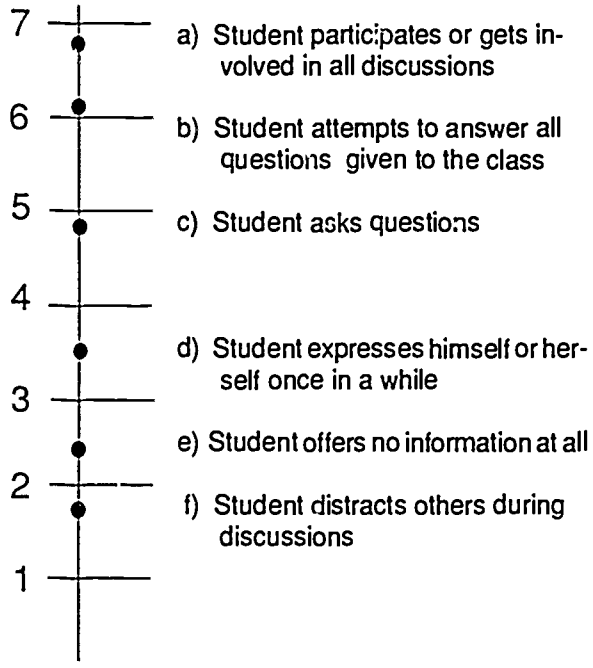
Developing a BARS is described in detail by Lyons, as a seven step process. The process begins by informing students how much participation will count toward their grade. As a second step, students are asked to write behavioral examples of: poor, adequate, and good classroom participation. These statements are collected and then "cleaned up" by a panel of readers to remove non-behavioral statements, ambiguous statements and duplicates.

This list is then given back to the class, with instructions to rank the statements in terms of the level of participation the behavior indicates. Values from one (lowest) to seven (highest) are assigned to each statement. Averages and standard deviations are calculated for each statement. The standard deviation is used to eliminate statements where there is wide variation in the assigned ranks. (Lyons indicates that statements with standard deviations in excess of 1.5 should be removed from the list.)

The scale is constructed using the averages. At least six items are necessary to anchor the scale--with average rank and behavioral statement clearly noted on a scale of one to seven (example on page 4). The last step of the process is to duplicate and distribute the scale to class members, so that they know the criteria to be used for grading their class participation.

Grading Participation ...continued from p3

An example of a BARS (from Lyons) is shown below with six anchor points.



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Rosenshine, B. (1983). Teaching Functions in Instructional Programs. The Elementary School Journal, 83 (4), 335-351.

Smith, P.C. and L.M. Kendall. (1963). Translation of expectations: An approach to the construction of unambiguous anchors for rating scales. Journal of Applied Psychology, 47, 149-55.

EXCHANGE BOARD

One professor wrote to say that it is difficult to keep discussions on track when the instructor does not actively control the course of the discussion. The lead article in this issue of I/X, "Lecture Variations" addresses this comment to some degree. If you have suggestions on how to keep discussions on track, please share your experience with us.

Another comment we received concerned the article, "Testing Tips" (September issue). In that article, it was stated that students should be instructed to choose THE best answer on a multiple choice test. THE best answer should have read the BEST answer -- the implication being that if students are directed to choose a selection from multiple choice items, the good foil will be partially correct. To avoid the dilemma of arguing the point after the test (or during the test), stressing that the BEST answer(s) should be chosen may be helpful. It was not the intent to imply that there could be ONLY one answer for any test question. In many testing situations it is useful to have several correct answers. The key would then reflect multiple correct answers and varying weights could be assigned to different responses.

Have strong reasons for grading/not grading class participation? VAX them to BUNDA. Replies will be reported in a future issue of I/X.

A Planning Outline for Leading Discussions

According to McKeachie (1986), "Discussion methods are among the most valuable tools in the teacher's repertoire." Although discussions are probably not the best method for imparting new knowledge to already-motivated students, discussions are appropriate for a variety of classroom goals. Integration of information, problem solving, and application skills can be practiced in a discussion setting.

Preperations for discussion are as complex as preparations for lecture if the discussion is to be an effective method of instruction. First, the discussion leader must plan and prepare for the discussion. Second, the discussion leader must be able to facilitate the discussion, and third, the leader must provide feedback to the discussion participants.

Planning for a discussion

Hyman (1980) recommends a 10-point process for planning a discussion period.

1. Choose the discussion topic. Select the topic so that the discussants' interests and needs are considered. In some cases it may be possible for the group to choose their own discussion topics, rather than having the topics chosen by the instructor. The procedure for topic selection, however, should be determined by the instructor.

2. Phrase the discussion question. Write out the question to be sure that it is clear and precise. Work on making the question as brief as possible. Be aware that student "maturity" will play a role in the ability to discuss some questions. According to Perry's model of intellectual and ethical development (1970), students progress from a "we-right" versus "they-wrong" perspective to a realization of contextual truths during the college years. (This is discussed further in "Discussion Challenges" in this issue of I/X.)

3. Outline the topic. Write down aspects of the question that you feel are important to the discussion. Facts that will be critical to the discussion should be noted or obtained. Note that your outline of the discussion is not a guide for the discussants to follow, but is for your use in framing and guiding the discussion.

4. Plan for the beginning phase of the discussion. The introduction of the topic should be brief and precise. It is oftentimes useful to write out the introductory statement so that it addresses the procedural questions that discussants need answered to start the discussion. Different procedures for discussion should be either decided or left to the group. In the case that the discussion procedure is decided by the group, the leader should outline the method that will be used to decide the procedure. This may mean providing examples of appropriate procedures, such as full class discussions, two opposing sides discussion and small group discussion.

....continued on page 4

Overcoming the Dreaded Silence in Discussion

No longer the fault of classical adolescent peer pressure, the fear of being publicly identified as stupid for the higher education student has multiple sources, but often has a single result, silence. This fear crosses disciplinary lines and age groups; pre-law and pre-med students are obsessed with grades and terrified with failure according to Jane Crisler (1988). Computer science and accounting students are conditioned to view error as fatal. Returning adult students are as fearful of public disgrace as freshmen who graduated from high school three months earlier.

Faced with the possibility of being exposed by the more sophisticated or knowledgeable students, insecurity is heightened by the engagement of professors in relentless questioning. The student may well feel that it is "better to remain silent and be thought a fool than to open your mouth and remove all doubt".

Correspondingly, the vulnerability of the professor lies in the fear of failing to interest students in a discussion and thereby incurring their disdain and lack of cooperation. Fear of rejection, negative responses and loss of respect are identified by Sankowsky (1988) as sources of hostility in both instructor and student. Frederick (1981) speaks of the special embarrassment of realizing half way through a period of "discussion" that you have lapsed into lecture again.

Sankowsky suggests sensitizing oneself to perceiving students as fearful and "little" rather than lazy, bored, and "big". To Frederick, this is a psychological issue of control, best dealt with by directing attention to the planning and beginning of discussion. He recommends adapting ways of starting a discussion to your own texts, purposes, and teaching style. Four examples follow.

CONCRETE IMAGES

We often need help in remembering the context of our text, yet discussions are more productive when specific references are made. Go around the class and ask each student to state one concrete image/scene/event/moment from the text that stands out. No analysis is necessary, just recollection and brief description. As each student reports, collective images are listed on the board providing a visual backdrop to the subsequent discussion. Usually the recall of concrete scenes prompts further recollections and a flood of images flow from the students. Follow-up questions can be used as an inductive approach to the text. Questions concerning what is missing from the list of objects on the board can be used to aid memory. After the board is filled, analysis may begin with comparison and contrast among the objects.

GENERATING QUESTIONS

Students have their own questions about the text, and can learn to ask better questions. Being able to ask the right questions about a concept may be the first way of coming to terms with it. One way to generate questions is to ask students ahead of time to prepare two questions about their reading. Another way is to ask them to write down one or two discussable questions about the text at the beginning of class. Questions can be selected at random for class attention.

ROLE PLAYING

Generally role playing is an effective way for the normally shy student to contribute in a new role and participate more readily in conventional discussions that follow. Any situation involving multiple group conflicts is appropriate for role playing. The professor in simulations can play an active role as moderator, organizing and monitoring the interactions that follow group caucuses.

GENERIC TRUTH STATEMENTS

This exercise develops critical skills and generates a good friendly rivalry among groups. The instructions to each group are to decide upon three statements known to be true about some particular issue: "It is true about slavery that...", "We have agreed that it is true about the welfare system that...", " We know it to be true about the theory of relativity that...", and so on. This strategy is useful in introducing a new topic where students may think they already know a great deal but the veracity of the assumptions demands examination. The complexity and ambiguity of knowledge is clearly revealed as students present their truth statements and other students raise questions about or refute them. The purpose of the exercise is to develop some true statements, perhaps, but mostly to generate a list of questions and issues demanding further study.

Discussion Challenges and Solutions

?? How can I get students to adequately prepare for a discussion?

When a discussion is based on a question, it is important that the students have sufficient background to discuss. If the text or other reading assignments are not being read prior to class time, it is possible to force preparation by giving a quiz before the discussion. Another type of solution is to provide the stimulus for discussion in the class. A short reading, a film or slide presentation, a role playing exercise may provide a common experience for starting discussions. Yet another possibility is to announce the discussion topic in advance, describing the information the discussants will need to obtain before the class discussion.

?? How can I control the person (or group) that monopolizes the discussion?

It may be possible to talk to the student outside of class time to come to some agreement on their level of participation. In other instances, it may be necessary to use discussion strategies that eliminate the possibility of monopoly (such as buzz groups). Yet another solution is to assign the monopolizer to the role of recorder or discussion observer.

?? How can arguments be resolved?

When discussions turn into arguments, it there are is necessary to focus the conflicts so that learning takes place. Taking the argument out of the discussion and turning it into an assignment is a good method, if facts that can be obtained to support one or both sides of the argument. If the argument involves value judgments, then it may be useful to clarify the values being debated. The opportunity may be present to teach students how to develop an argument based on fact and logic rather than on consequences.

?? How can I overcome the students' feelings that they are not gaining substantially from discussions?

Frequent summaries during the discussion tend to help students realize their progress. The conclusion of the discussion should also provide some recap of what was covered during the course of the discussion. It may also be useful to have students outline what happened during the discussion from their viewpoint, or to make a list of new knowledge/ideas they obtained through the discussion.

?? How can I overcome students' needs for "one correct answer?"

According to Perry (1970), college students develop intellectually throughout their college years. As students move from a polar world of dualism to a relativistic world, they will change in their abilities to understand and discuss viewpoints different from their own. They will also grow in their ability to accept that there may not be a single answer to a discussion question. In terms of a solution, there isn't any. It may be most useful to gauge the discussion question to the modal level of intellectual development in the class.

EXCHANGE BOARD

From one reader... "Thanks for reminding me that students will model my lecture-type behavior. I will be more careful, knowing that my graduate students are likely to pick up my habits."

And another commented that the article "Grading Participation" (number 2), "raises pseudo-science to new heights." Questions were raised such as: Who teaches students HOW to write "behavioral examples" of varying degrees of participation? and Who teaches the teacher? Where does the "panel of readers" come from? Is it necessary to grade participation? Although some clarification may come from the original article by Lyons, there may be other experiences with these scales among readers. One major issue seems to be whether participation should be graded at all. Any further comments??

Outline for Planning ...cont'd from p 1

5. Plan the middle phase of the discussion. Decide which key questions will be necessary to answer during the discussion. There will probably be a logical sequence to these questions as the discussion progresses.

6. Plan how to end the discussion. Drawing conclusions and recapitulating major points are important to pull together the learnings from the discussion. Although these conclusions cannot be formulated in advance, it is important to leave time for this activity. Any follow-up activities or assignments should be carefully considered in advance, recognizing that the exact nature of the assignment will depend on the course of the discussion.

7. Decide your role in the discussion. The discussion leader must carefully consider how he or she will guide and direct the discussion without dominating the group. Whether the leader will be an authority, resource, or stimulator is a decision to be made before the discussion begins.

8. Plan for involvement. In some cases, maximum involvement can be planned through considerations of seating, group size, and question relevance. It may also be necessary in some cases to assign specific roles to the discussants so that participation is forced. Roles such as periodic summarizer, recorder, time keeper, resource person, and a recapitulator, who summarizes an entire period's discussion, can be assigned to group members.

9. Plan the use of time and space. For each phase of the discussion, estimate the amount of time needed. Be sure that adequate time is allotted for involvement and disagreements among the discussants–group work takes time. Appropriate seating arrangements should also be considered in the planning.

10. Plan for physical and human resource use. Visual aids and other discussion aids can be used to improve the quality of the discussion. A guest expert can be used as a resource person, a respondent to discussion points, or as a logic checker.

Using these planning steps, a discussion will likely meet the objectives and goals of the instructor.

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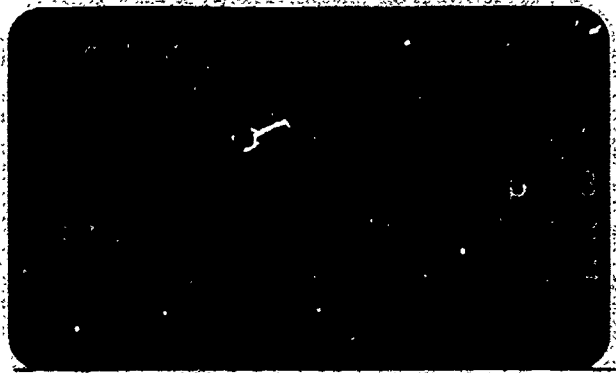
Components and Causes of Course Design

College professors spend a great deal of time "designing courses." It is relatively rare for this design work to be for a course which has never been taught before or a complete revision of a sequence of courses, but very common for the details of a course to be altered. As Erickser. (1984) has pointed out, "good teachers do not offer the same course twice; new information is introduced, goals are clarified, the reference list is revised, existing principles are modified by recent findings, links with surrounding disciplines are strengthened and areas of application are extended. The changes from one year to the next may be small, but the cumulative effect keeps the curriculum up-to-date." (p. 14). The myth of a professor lecturing from notes yellowed with age is just that -- a myth.

Elements of Course Design

The design of course goals or setting expectations for students, the communication of those goals to students, and the methods by which faculty determine whether the goals are achieved will be the agenda for I/X during the Winter term. This issue of I/X is dedicated to the ways in which professors may alter the goals of a class. Next month the primary paper vehicle for communicating those goals to students, the syllabus, will be discussed. In March, we will explore the elements of grading and instructional support. The separation of the topics is, in some respects, artificial, since expectation are often stated in syllabi and grading practices also reflect expectations. However, each of the topics is complex enough to require an entire issue of I/X.



Instructor Control

The perspective on who sets expectations taken in this issue is that each instructor makes changes in the delivery of each course. We realize that many courses have groups of individuals working as a team on the delivery of multiple sections of a course. Also, some departments have curriculum committee review of courses which exert pressures on the goals and expectations. Other departments exert no influence over the content of a course or multiple sections of a single course. To some extent the amount of coordination among the courses varies systematically with the amount of structure in the discipline. Whatever the planned curricular control, at some point one instructor walks into a single room and closes the door. The interactions between student and instructor in this private space play out the concrete expectations for the course.

Beyond Discipline Change

Excluded also, from our discussion, is the extent to which new findings in a field will alter a course, although most professors would contend that the field of study is the primary rationale for changing a course. The use of new material to revise course material is naturally performed by every professor. Other, perhaps more subtle influences, are not necessarily part of the conscious revision of courses. Setting expectations will be discussed in the context of how the students themselves and the rest of the curriculum can alter the goals of a course.

Setting Class Expectations

Making your expectations clear to students early in the course reduces the confusion that results from their trying to guess what it is that you want them to do. Clear statements that tell what you expect, the objectives to be accomplished, provide a structure for your course as well as an atmosphere of honesty that benefits both students and instructor.

What Happens to Expectations?

The goal is to clearly state class expectations that are both achievable and high. According to Hartz (1989), there are several temptations that an instructor faces in setting realistic goals for a class.

* Acquiescing to Lower Standards (particularly with respect to reading and writing expectations)
* "Dumbing Down" through the choice of textbook
* No Papers
* Learning things rather than learning how to do things
* Exclusively "objective" exams

Hartz discusses these temptations in terms of their implications in introductory courses. He concludes that there are reasons to hold high course expectations -- "future jobs are going to require, on average, much more sophisticated reading, critical analysis, and writing skills than jobs in the past," and that there are some ways to ensure that students understand and appreciate the importance of these expectations.

Hartz recommends that the faculty work together to make expectations more consistent among same-level courses across disciplines, and further recommends that instructors explain their rationale for the level of expectations to students. At the very least, expectations should be common across courses at the same level within a single department or multiple sections of the same course. The commonality of the expectations across courses reduces the amount of explanation which must be given for expectations in any one course. Not all forces on expectations in courses result in lowering the goals. Some forces merely constrain the flexibility of the professor.

External Forces on Course Goals

Frequently, the needs and backgrounds of students may be departmentally "controlled," as in the case of prerequisites and sequencing of courses. In this case, goals and expectations are set by curricular articulation -- by describing how this class fits in the program scheme. Faculty need to work in concert to ensure that goals demonstrate a meaningful progression for students following the sequence. Not only should faculty allude to the use of skills attained in previous courses, but if problems arise because of skill deficits, curricular meetings should be called to address the problem.

A second source of external control is exerted by accrediting agencies or licensure tests. Faculty are often constrained to cover certain material because of these groups. Sometimes the material is not easily integrated into the structure of the course. Students should know when material is mandated by an outside agency and the rationale for the inclusion of the material. While students may be more interested in whether the material will be on a licensure examination, the rationale might better be given in terms of the use of the material within the context of professional activities.

Internal Forces on Course Goals

Another dimension of setting course goals is the student dimension. Course goals should clearly take into account the needs and backgrounds of the students enrolled in the course. In cases where there is no sequencing, it may be necessary to find out about the needs and backgrounds of the students. Survey forms administered during the first class meetings can be used as a simple and effective means of ascertaining student attitudes and backgrounds. Questions such as:

What is your major?

Why are you taking this class?

Is this class required for your course of study or is it an elective?

How much experience have you had in this subject area?

How do you see yourself applying the material covered in this course?

Will you be continuing to take classes in this field?

The course can be "tailored" or fine-tuned at this point to take advantage of this information. The results, in addition to providing information regarding goals, can also be used to help stimulate individual student interest and group interests, and to help clarify personal objectives for taking a course (Meyers, 1986).

A formal survey of students is not always necessary. Experience with a course will often lead to knowledge of the mix of students in terms of majors and non-majors or in terms of transfer students and students who began their careers at Western or proportion of sophomores to juniors. These data can be used to alter the course to make it more meaningful. However, professors should be careful to verify their presumptions about student interest with data from time to time. Professors differ dramatically in the way in which they deal with class heterogeneity. Some professors believe that the differences among students add to the quality of discussions, while others would rather have students who have very common backgrounds. Great differences in the entry level of students makes setting common, reasonable, yet high expectations for all students difficult.

Conclusion

"Outside of oxygen and maybe light, the two most important things in a classroom are teachers and students," (Eble, 1988) all else is more profitably encountered and put to use outside of class. Ideas generated, information exchanged and absorbed, a subject matter in its abstract form are all dependent within the classroom, in large part, upon the expectations (met and unmet) of teacher and students. The course plan, clearly stated and shared with students, and based on student needs and backgrounds helps to set the stage for all that is to follow.

EXCHANGE BOARD

In the last issue of I/X we printed some comments on using participation as part of grading and asked for more comment. It is difficult, if not impossible, to print responses intact. However, we offer this long abstract because of the number of issues which were raised by this reader.

"Yes, I have strong reasons not to grade class participation--Stated simply, my reasons are threefold:

1. Some students suffer from communication apprehension, stage fright, whatever you want to call it, and I don't think that they should be penalized for this affliction if communicating orally is not an integral part of the needed requirements for the class. In public speaking, such an affliction would, unfortunately, have a detrimental effect on their speech efforts, and consequently probably on their grade as well.

2. Amount of participation is also directly related to personality variables, particularly introversion and extroversion, and it is inappropriate to grade students on their personality type instead of on what they have learned and can apply, in their own personal style. Introverts may not say as much in class or ask as many questions, but they frequently write better than the extroverts. Research indicates that they make better grades, in spite of, (maybe because of) their introversion.

3. Unless QUALITATIVE measures of participation are employed, QUANTITY of participation would be a poor if not irrelevant, measure of student knowledge in a given field. Some students who have been high participators in my classes have also been the least contributive to the educational goals of the class. They typically are extroverts with very low communication apprehension, and their comments are too frequently ill-conceived, wordy, and off the mark. The BARS anchor points from Lyons emphasizes quantity. Attempts to quantify the qualitative dimensions of contributions, without recording or videotaping, would be highly subjective and subject to student complaint of fairness.

So, unless a professor has the ability to assess and appropriately reduce communication apprehension, factor out personality variables, and can accurately and fairly judge the quality of class participation, grading participation is a highly questionable educational practice."

The First Day of Class

First impressions, although frequently said to be misleading, are a real concern in college teaching. On the first day of class, students form lasting impressions that may either benefit or detract from the learning environment. Therefore, it is important to plan for the first day of class and to consider the tone that will be set.

Set the Class Apart

The instructor must be aware that students usually have other courses that will meet during the same days, and must be able to assist the student in making the transition from one subject to the next. For the first class meeting. this has implications in the way the instructor introduces the content of the course. Eble (1988) recommends using showmanship in the first class period -- as long as the impression is not one of "all show and no substance." On the other hand, all substance and no show can be equally difficult to overcome in the following classes. The intent is to pique the interest of the students in a manner that is consistent with the instructor's temper and the temper of the class.

Introduce Yourself

It is useful to share something about yourself with the class, at the outset. One alternative may be to describe your introduction to the subject you are now teaching -- your experiences in a similar class, or your perspectives on what a class of this type should cover.

Plan Student Interaction

Allowing students to meet each other is also a valuable exercise for the first class period. There are numerous ways to accomplish this, through self-introductions, having students introduce other students, or dividing into small groups to meet in combination with a group activity. The benefits of students meeting and feeling comfortable with each other are realized in many ways. While more difficult to orchestrate in a large class during the class session, the instructor can encourage people to meet outside of the classroom. Sharing information about the class and assignments, forming informal study groups, and providing a more relaxed atmosphere in the classroom are benefits that come from students becoming familiar with others in the same course.

Be specific about your expectations with respect to sharing. Do you expect students to form their own study groups? Do you have study group activities which they can use? Is there tutorial assistance for this class? How should collaboration take place, i.e., discuss appropriate and inappropriate collaboration. What you may think is a clear violation of the student code of life, they may see as merely helping one another. They also may not see the benefits of studying together unless you point it out to them.

The first days of Winter classes have already come and gone, this may be a good time to evaluate those first meeting periods, to determine whether the first day set the right tone for the class. Jot down the ideas and insights you have now so you can use them on the next "first day."

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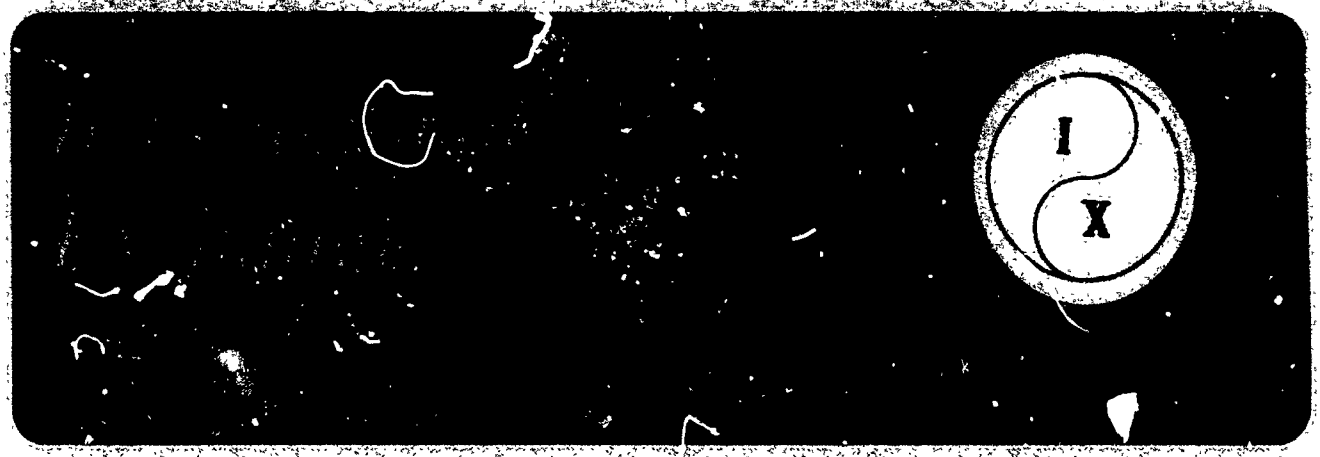

Communicating the Components of a Course

A course syllabus is commonly envisioned as the outline of the course regarding the topic, schedule, assignments, and activities. A syllabus can actually contain a great deal of information about the course and the instructor. The syllabus can be used to describe a contract between the instructor and the student. It can serve not only as a guide to each of the sessions of the course, but as an organizer to the whole course experience.

Complicating Issues

There are many issues that complicate the construction of a course syllabus. Clearly, the level of the course and the discipline will have a great influence on the structure and content of the syllabus. Additionally, the professor's individuality will affect what form the syllabus will take.

Consider the effect that each of the following comparisons may have on what a course syllabus can and should contain.

- An introductory course is likely to rely on a few well structured resources, i.e., textbooks and student manuals, while a graduate topical seminar is likely to specify a range of journals for the students to use.

- Introductory courses are likely to include a number of quizzes and homework assignments, while advanced courses may have one major paper and a final exam specified in the syllabus.
- Disciplines which are highly structured, e.g., languages, natural sciences, and mathematics, tend to have less flexibility in terms of the order in which the concepts are presented.
- A professor, who has taught the course for several years, relies heavily on his experience to guide the flow of the course and choice of assignments. A colleague teaching the same course for the first time may rely more on the text to provide the necessary structure.

Diamond (1989) makes a case for using a comprehensive "student manual" to clarify the roles of both the students and the instructors. Recognizing that exact content and format of the manual will differ for different classes, Diamond offers some suggestions on what might be included in a manual. The National Center for Research to Improve Postsecondary Teaching and Learning (Stark et al., 1988) also has provided a listing of syllabi elements. Both sources recognize that their lists provide an idealized form of the syllabus--they do not differentiate across disciplines or across levels of courses. A combined list of suggestions from these two sources is presented on the next two pages.

The material is presented as a checklist and may be used quite easily to: analyze your current syllabus, decide what you want to include in the next syllabus you construct, or stimulate thought on what you believe your department should consider as departmental policy for syllabi. The checklist can further be used by a Department to analyze program structure and to approach the topic of curriculum reform. The caution in using the checklist is that it must be subject to the particulars of the situation and not vice versa.

THE SYLLABUS PLANNING CHECKLIST

____ 1. Title and number of the course, where and when the course meets (indicate any course meetings which are not located in the assigned room).

____ 2. Prerequisite courses or established skills that are expected of the students in the class. Consequences of not meeting the expectations. Ways that students can brush up on required skills, if they are unsure of their capabilities.

____ 3. Letter to the student expressing the intent of the course.

____ 4. Table of contents for the manual/syllabus.

____ 5. Purpose of the manual/syllabus and how it should be used.

____ 6. Introduction (general course information, rationale of how this course fits into the program of study).

____ 7. Personnel involved in the course and how to contact them (office hours, phone numbers, preference for voice mail or not, E-mail account.) Note any required contact with instructors outside of the classroom.

____ 8. Overview of course content (course outline, general course objectives, modules or units to be covered).

____ 9. Description of methods of instruction which may be unique. Fuller descriptions are required if this is the first time students will encounter a particular method, e.g., group projects. Note any equipment students must access because of the method of instruction.

____ 10. Relationship of this course to other courses in the program.

____ 11. Relationship of this course to external agencies such as licensure boards, certification requirements, or state law.

____ 12. Evaluation and/or grading procedures (proportion that exams and assignments contribute to the course grade, scales or forms used for grading).

____ 13. Policy statements regarding attendance, acceptability of late assignments, conditions and procedures for make-up quizzes and exams.

____ 14. Opportunities for non-graded feedback. Acceptability of turning in the first draft of a paper.

____ 15. Examples or statements regarding requirements of written assignments and papers. Information on the location and availability of samples.

____ 16. Module or unit descriptions (unit objectives, note-taking aids, flow diagram of unit, specific requirements or assignments within the unit).

____ 17. Materials (text name and author, other course readings--how to get them and how to use them).

____ 18. Statement of rationale for papers, assignments, projects, lab work, and choice of text.

____ 19. Calendar (holidays, exam days). May want to use less detail rather than more, since things have a habit of changing in mid-stream.

____ 20. Reading requirements linked to the units and the calendar. Statement of whether students should read the material on the lecture topic prior to the lecture.

____ 21. Facilities and important physical resources for the student (labs, libraries, museums, etc.). Availability of tutors or study aides to assist students.

CONTINUED NEXT PAGE

... MORE CHECKLIST

____ 22. Checklist of assignments for which students are responsible to complete the course.

____ 23. Sample test or sample test questions or information concerning where sample tests can be found (such as the departmental office, the reserve desk at the library, the textbook, or other textbooks on reserve).

____ 24. Copies of readings or other materials that are necessary to the course and not available elsewhere (copyright or credit notices required).

____ 25. A comprehensive bibliography for the course.

____ 26. Annotated supplementary materials for students to explore. The annotation may contain not only what the material is, but a rationale for its use, e.g., a reserve book which is comparable to the textbook but which is written at a slightly higher or lower level of difficulty, an alternative to the textbook for one particular chapter, or a book of readings which contains some of the classic articles in the area.

____ 27. A listing of University sponsored or community events which are complimentary to the course content, e.g., departmental symposia, performances at Shaw or Dalton Theaters, public forums and presentations.

EXCHANGE BOARD

In the October issue of I/X we covered a number of different formats that the lecture could take and also hinted that lectures need changes in pacing. Linda Delene in Marketing has found that varying the style of the lecture provides the kind of tone difference that is particularly important in large classes. The lecture itself or presentation of new material is followed by an applications section or a discussion of that material. The applications/discussion section allows for the elaboration of the concepts and provides time for the new concepts to settle in. The closing section of the lecture is a preview of the next class. This not only closes off one topic, but allows for a linkage to the next topic. Advanced organizers, given to the students for their subsequent reading, provide another means of tying the course material together.

At the "Teaching Large Classes" symposium (held on campus in November,1989), all four speakers agreed that time allocated for student questions during the class period was generally unproductive. The questions often were off-task or concerned trivial aspects of the topic being presented. Two alternatives to taking questions during each class period were mentioned.

(1) Have the students prepare questions on index cards every third class or so. Draw a few cards from those submitted to discuss in class. Students have reported that the activity of writing the question often clarified a concept for them.

(2) Use E-Mail and CONFER as alternative avenues for students to ask questions. Each of these VAX systems essentially gives you 24 hour office hours. CONFER gives the students access to not only you, but to other members of the class who may be able to help with an explanation. It is an electronic study group.

WHY BOTHER?

Diamond (1989) cites several strong reasons for using a comprehensive student manual.

1. One of the biggest needs students have in entering a class, is to understand the responsibilities for successful completion of the class. By providing a clear time frame for assignments and tests, students can learn to manage their time more effectively to meet the requirements. In other words, students learn more efficiently and effectively with a well constructed syllabus as their guide.

2. Providing alternative sources of readings or study activities in the syllabus allow the students to manage their study investment without asking for sources. This means that the student does not have to admit to you that he or she is having trouble with a particular concept (which many students have difficulty doing).

3. The manual can also be used to improve the note-taking process of students by presenting essential diagrams, formulas, and charts that will be used during the course. Lecture outlines or fill-in-the-blank sheets corresponding to a days lecture material may be used. By providing these types of materials, the student will have ready-made organizers and will be able to concentrate on the material, rather than on the note-taking.

4. Hints on how to use the textbook as a study aid are especially important when the text lacks obvious study aids such as chapter overviews, chapter objectives, summaries, or study questions.

5. Providing examples of questions used in tests or providing a sample test will give students a better sense of how they will be evaluated. In addition to reducing test anxiety, this information can direct students in their study habits.

Along with these student-centered benefits, there are benefits to the course and to departmental programs that may result from the use of a comprehensive student syllabus. Stark and Mets (1988) have shown that a large number of factors can influence the development of a course. Organizational theory as well as instructional models may influence the amount of control outside forces have on a course's development. Without a syllabus, these forces cannot be documented. Stark et al. (1988) investigated the construction of a syllabus as a mechanism for studying curricular coherence in higher education. They contend that the coherence and integrity of programs in higher education are linked to the coherence and integrity in each of the courses in the program. Recognition of where the students have been and where they are going is an essential element in the design of a curriculum.

A FINAL NOTE

The production of a comprehensive student manual may be complicated by either cost or personnel considerations. Each instructor should find out the departmental limitations that may exist in producing this type of document. Consider, however, that some costs (either for personnel or printing) may be recoverable by selling the manual to students.

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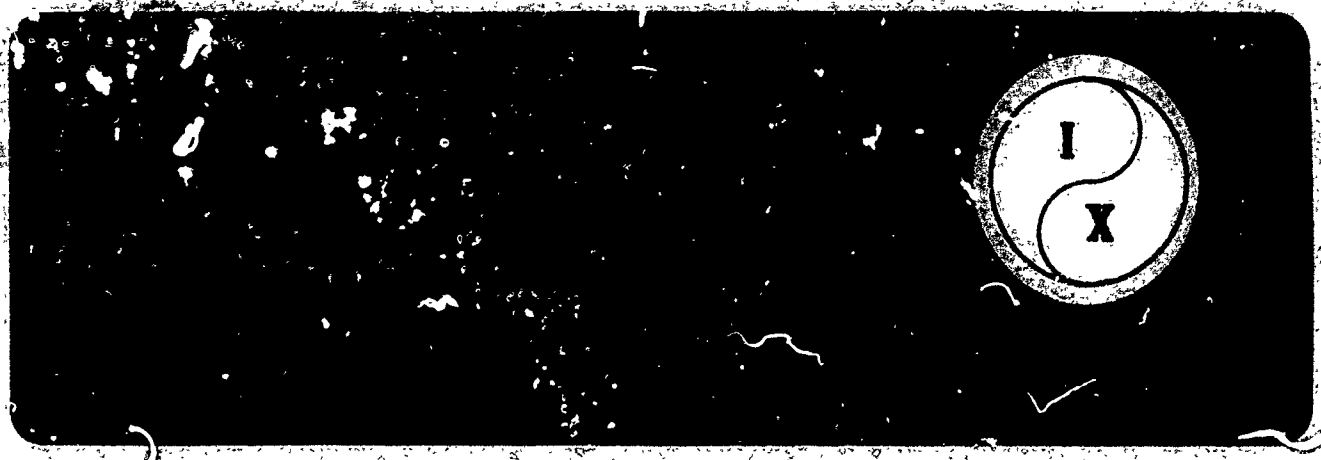

PASS -- A PROGRAM FOR TUTORING

A computerized system for tutoring and testing students, called PASS, is being used by a variety of faculty members at Western. The PASS program can be run on the VAX system (program authors, Jim Jenks and Bruce Paananen) or on personal computers (program author, John Dilworth). Particularly useful to instructors with large classes or to those who offer correspondence courses, PASS makes it possible for all instructors to develop computer-aided instruction for their classes.

PASS assists students in three different ways.

1. PASS can be used to tutor students. In a tutorial, instructional material is presented to the student, followed by observations (questions). The student answers the question and receives immediate feedback on whether the answer was correct or incorrect, and information about WHY the chosen answer was either correct or incorrect.

2. PASS allows the student to correspond with the instructor about anything in the program. The faculty member responds to student queries using a sophisticated version of E-MAIL.

3. Used for testing and grading, PASS can provide immediate feedback to the student regarding their performance. Test information is also provided to the instructor regarding student performance and question or item performance.

PASS is being used by faculty in Electrical Engineering, Philosophy, English, Social Work, and Business Information Systems. Art Falk, Philosophy Department, has developed the use of PASS for his Philosophy 200 class and actively encourages other faculty to investigate PASS for their use. What follows is a description of how PASS has been developed for this specific use.

PASS -- PHILOSOPHY 200

The PASS tutorials for Philosophy 200 are in 7 areas. Five of those areas correspond to the sections of the course: God, mind, world, free-will, and ethical values; the two other areas are logic and past tests. Each of these 7 areas or groupings has 5 to 10 tutorials, each of which consists of 10 to 30 questions. For example, under the section of "world," there are tutorials on Descartes' Meditations, Berkeley's Three Dialogues, one concerning Locke, one on Hume, etc. About 500 questions, most taken from exams, are available on these tutorials.

Questions are generally multiple choice in the form of completing a sentence with 1 of 5 alternatives. (The PASS program will allow more than 5 alternatives, and also will allow short answer responses, in addition to multiple choice.) Generally, there is one correct response for each question. (PASS will allow more than

Continued on page 2...

PASS Program .....cont'd from p 1

one correct response.) Questions are arranged to track the sequence of thought in the assigned texts. A few questions develop criticisms that Dr. Falk explains in class.

The PASS program allows informational text to be mixed with the questions. Virtually any amount of text can be written into the program for the students to read prior to the questions. This can be useful in presenting a "case" or "setting" for the questions that follow. One way that Dr. Falk uses this feature is to identify the area of text that will be covered in each section of the tutorial and how many questions will be presented.

The students in Philosophy 200 receive information about the PASS program in the course syllabus. The material explains how to:

(1) find and turn on a VAX terminal
(2) log on to the VAX
(3) get to the tutorials
(4) send messages to Dr. Falk and receive replies
(5) exit the tutorial
(6) use the class bulletin board
(7) connect a micro to the VAX
(8) get printouts of class materials from the VAX
(9) get printouts from the Philosophy computer lab

One of the best features of PASS, according to Dr. Falk is the ability for easy, one-on-one communication between instructor and student. By using the built-in message exchange, students can ask questions (often stimulated by a tutorial question) and receive answers through the PASS program.

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Seeing how PASS works -- a demo

PASS demonstrations can be accessed for both VAX and PC versions of the program. First, an outline of how to access the VAX PASS demo is presented. (One does not have to be an experienced VAX user to follow this outline.) Following the VAX instructions, are some ways to demo the PC version.

To look at a demonstration version of PASS on the VAX, you first need a VAX account. If you do not have one, call Elaine van Belleghem at the Academic Computer Center (7-5446). To get on the VAX system, the computer will ask for your username and password (which you will get from Elaine.) Messages of general interest will usually be displayed as soon as you are "signed on" followed by a

$

The dollar sign is the prompt -- it means that that the computer is ready for a command. To access the demo, after the dollar sign, type:

RUN LIB$CAI:DEMO

Type this exactly (no extra spaces or punctuation) and then hit the "enter" key. The computer will show a PASS screen, with the instructions, "hit any key to continue." When you hit a key, a menu will appear on the screen, which gives you the option of looking at 6 different tutorials. For the introduction to PASS, which gives you an overall view of how the program works, select the option,

INTRODUCTION TO PASS

This will lead you through the PASS program, with instruction (text) and observations (questions). By using the spacebar, you can move sequentially through the instructions and observations. If you choose to answer the questions (observations), you can use the tab key to call up the alternatives. Then type the letter that corresponds to your choice, and hit the return (or enter) key. These instructions are displayed in a box at the top of the screen. Displayed at the bottom of the screen are directions for invoking

.....Continued on p 4

1. What did you like about Instructional Exchange?

2. Which articles did you find useful?

3. What didn't you like about the newsletter?

4. Do you know of innovations or practices on campus that should be highlighted in coming issues? If so, what are they?

5. Would you be willing to write an article about teaching and learning at Western on a topic of interest to you? If so, what topic? (Also, please identify yourself if you would be willing to write.)

6. Are there other topics you would like to have addressed next year? Please list.

fold line — fold over last

Campus Mail
Delivery

Office of University Assessment

Room 2010 Administration Building

fold line — fold under first

Be the Competition for the Local Video Store

How many students do you think have access to a VCR? How many of these students are more comfortable watching something on TV than reading about it? Why not take advantage of their most comfortable information channel?

Walt Turner in Mathematics and Statistics has found a way to do just that. He has videotaped himself solving math problems and has made the tapes available to students. Think about the options they have for using the tapes -- playing them several times, or going back over a segment of the solution which is a little tough for them.

At Dartmouth, the physics department has a similar approach. The department has stored lectures and problems from former textbooks, enabling students to see a concept practiced in more than one way. Using multiple textbooks varies the format and style of problems just enough to make it interesting for the students. This takes advantage of the fact that while textbooks change, the basic principles of a field do not become quickly outdated. What the students appreciate is that the explanations are available for as many viewings as they would like, in settings most comfortable for them.

Those of you who may not want to step in front of the camera yourself may still want to consider the small screen. You might suggest that your graduate students prepare tapes of the presentation of specific concepts or (for those of you in the quantitative area) the solution of specific problems. The tapes become resources for the undergraduate students and one mechanism to help graduate students become better teachers (as both you and the grad student view the tape and discuss his or her style of teaching.)

Taping facilities are available on campus. Contact Howard Poole at 7-5780 for more information.

EXCHANGE BOARD

Because of the insert, you are probably aware that this is the last issue of I/X until next fall. It would be extremely useful if you would complete the questionnaire and return it via campus mail. One person recently wrote regarding the February issue of I/X as follows: "I have always been suspicious of educationalese, and have continued to wonder ... how increased emphasis on method could lead to the watering down of the educational process at all levels." It is important to the I/X staff to get candid feedback--if we don't know how the newsletter is doing, with respect to meeting the needs of the audience, we cannot hope to meet those needs in the future.

We believe there is a huge potential for using this type of publication for exchanging information about teaching and learning here at Western. This issue of I/X is more directly focused on this type of exchange. If you have answers (for other instructors' problems) or questions (you would put to other instructors) or even issues to suggest, please use the insert to communicate these.

Several other comments came in response to the February issue of I/X regarding syllabi. There seems to be a trend toward syllabi as "quasi-legal" documents that are used to set the rules and regulations for the class. Some instructors may even use the syllabus as a contract, which the student must sign as evidence that they understand and will abide by the stated terms. Is this the direction that your syllabi are taking? Comments on this trend?

THINKING ABOUT USING PASS?

There are a few points to consider as you contemplate the use of PASS for your classes.

PC versus VAX

Decide whether your students should work on the VAX system, in a University PC lab, or both. Factors that enter into the decision include: how you want to respond to student queries and your ability to secure permission to use a PC lab. Also, getting the programs loaded onto the VAX takes a few more steps (one-line commands) than with the PC versions.

The VAX system offers the convenience of answering students' queries without having to use the same equipment (and software) that the students use. When communications take place via the VAX, students and instructors can use the VAX terminals most convenient for them. On the PC version of PASS, the students' queries would be on the PC program. To access the queries, the instructor would have to access the same equipment that the students used to send the queries; to access the replies to queries, students would have to return to the same lab.

If you choose the VAX option, call Elaine van Bellagham at the Academic Computer Service (7-5446) to get VAX accounts for your students. If you prefer the the PC version, locate a PC computer lab and get permission to use it for this purpose. Once you have permission, call John Dilworth to install the PASS program in the lab.

Writing the Tutorials

Tutorials must be typed into word processing files and saved as DOS text files. If your test questions are already in a word processing file, it may be possible to edit your file to contain the PASS commands. If your test questions are not already in a computer text file, you will need to type them in. This may be time-consuming -- particularly if you want to add comments and references that do not appear on your original instruments.

Remember that you can build slowly. You may start with one tutorial and gradually add questions and comments over time. Student comments could be used to build and improve the tutorial. Also, you may be able to work jointly with other instructors who teach the same class. It may make the process much more "feasible" to think in terms of small units of work and collaborative efforts.

Getting Started

Directions on how to access demonstrations of PASS are provided on page 2. However, if you want more companionship as you work through the demonstrations or if you want to practice building a tutorial file in a controlled setting, there are workshops you can attend. **Call Instructional Development (7-6045) to find out when and where PASS workshops will be offered**. Both the PC version and the VAX version of PASS are available for these workshops; PASS users are present to help you through the process.

Complete documentation of PASS usage is also available from the Academic Computer Service. The detail that you need to actually use the system fluently is outlined in these documents.

PASS Demo .....continued from p 2

other commands for leaving PASS, sending comments to the instructor, and moving around inside the PASS program.

If you go all the way through the **Introduction to PASS**, you will end up again at the PASS Main Menu. If you want to look at how PASS is used in Social Work (demo by John Flynn), Electrical Engineering (demo by Dean Johnson and Nacer Hedroug), BIS (demo by Joel Bowman), Philosophy (demo by Art Falk), or by the Academic Computer Center, cursor to the appropriate selection and hit the return key.

When you are done, and back at the $ prompt, you may sign off the computer by typing

LOGOFF

Now you can turn the computer off.

To see the demonstration on the PC version of PASS, you must either be on a computer that already has the program or you may obtain a disk of the program to use on a PC. The PC version is installed in the Philosophy computer lab (Room 2470 of Dunbar) which you can use to demo or to copy the program. You may also want to contact John Dilworth regarding access of the PC version of PASS.