

ESO 332

TOOLS FOR TEACHING

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Effective classroom teaching is a great challenge. There is a good feeling when walking out of a class after having effectively communicated with a group of students. You, of course, always hope that what has been presented is relevant and stimulating.

As individual teachers, it is difficult for us to appraise or evaluate our individual teaching styles -- we can't see the forest because of the trees. Nevertheless, I accept this charge of visiting about effective classroom teaching with pleasure.

The Educational Process

It may first be helpful to review what is meant by learning. I would like to use this chunk of walnut as an analogy. There is much similarity between what happens to this piece of wood, as it is worked, and what happens to an individual as he learns.

For this piece of wood we need to first decide what item(s) to make. Will it be made into a salad bowl, gavel or lamp? Once this has been determined it can be appropriately sawed, shaped, sanded and finished.

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Of course, some kinds of wood are more suited to salad bowls, gavels, and lamps than others. The wood grain is different, and some woods are too soft. How different, then, is what happens to this piece of wood and what happens to an individual while learning?

An individual has goals and objectives, plus abilities. The learning process releases this bundle of potentialities so that the person develops skills, habits and other distinguishing personal characteristics.

To be educated, it has been said, is to have knowledge that allows us to understand our society, to have the ability to look at the world and its problems, and to have a set of values and the courage to defend them. The formal educational process contains a myriad of relationships between curriculum, faculty, and students. The curriculum represents the rules of the game and is comprised of requirements (university and/or college) and free electives. Courses in the social sciences, humanities, and natural sciences are very beneficial to the student. The right combination provides keener insights into self-expression and sensitivities, develops greater understanding of the concepts upon which our society is built, and provides an opportunity to share in an appreciation of the basic scientific disciplines.

The teacher directs student abilities to meet specific goals and becomes an integral part of the learning process. In other words, the teacher sets the stage for the discovery process.

Individuals

When you walk into your favorite hardware store you see many tools. But, upon closer examination you observe different kinds of tools such as hammers, saws, sanding blocks, chisels, and planes; each suited to a particular purpose. Likewise, when a teacher walks into a classroom on the first day of class, many people are seen. But, as is the case in the hardware store, each class is made up of individuals, each there for a slightly different purpose. Each of these individuals has a unique set of background experiences, aptitudes, abilities, interests, needs and levels of aspirations. Class size, course level and nature of the course do not alter this individualism.

It then becomes the teacher's role to conduct the class in such a manner that as many students as possible are challenged by the classroom experience and receive worthwhile, meaningful information.

Interaction

Some tools are used to sand, shape, plane and cut wood, i.e., sandpaper, wood rasp, plane, saw. These "interaction tools" are most valuable to a carpenter or cabinet maker, having very specific uses.

Interaction tools are needed by the teacher as well as the cabinet maker. An effort should be made for substantial classroom involvement so that the learning process can be enhanced. Interaction will tend to create interest and bring about further understanding in the subject matter being discussed.

Knowing the names of as many students as possible is desirable. An instructor is not going to know each student well in a large section; however, it is possible for the student to get to know the instructor fairly well and to relate to his examples.

Involvement can be brought to the classroom by the use of personalized anecdotes. Making reference to the family allows the students to "know me" and effectively reduces the "class size."

But, mental interaction is not enough. Physical interaction complements it. Occasionally discussing a topic while moving down the aisles of the classroom breaks down the distance barrier for the students in the back.

Gimmicks

One person's junk is another person's treasure! To some individuals, a given tool is a gimmick that lacks utility. To others, it provides utility.

As teachers, each of us tends to become comfortable with "gimmicks" that fit our personalities and tend to compliment our classroom effort. They provide variety and definitely add to a course. Granted that in some instances the "Hawthorne Effect" exists -- positive response because of newness of contrivance. If so, so what? Let it work as long as it will!

Personally, I have found Computer Assisted Instruction to have the positive value of a gimmick, but the lasting value of a tool.

An important segment of the course in introductory agricultural economics deals with production principles and the related cost concepts.

These concepts are difficult for many of our students to master, and many need a supplement to the text and classroom discussions to adequately grasp the material in the allotted time.

After consideration of a number of alternative methods, Computer Assisted Instruction was selected as the method for providing supplemental teaching of production principles. CAI met a number of important criteria: 1) It could provide realistic problem situations that reinforced the learning process; 2) It provided the opportunity for the student to schedule his own learning experience; 3) It provided immediate feedback, giving the learner continuous knowledge of his progress; 4) It permitted the student to proceed through the material at his own pace; 5) It provided comparable treatment of subject matter topics in a multisection course; 6) The programs could be authored by the instructors themselves; 7) The programs and language were very flexible, allowing personalized interaction; 8) It provided extensive record keeping and evaluative capabilities; and, 9) It provided a review tool for students enrolled in advanced courses in agricultural economics.

The student is frequently questioned. With a correct response from the student, the program branches into the next unit of the CAI materials. For an anticipated wrong answer or unanticipated answer, however, additional tutoring or explanation is provided. This amplification of the topic allows additional exposure to the material and enhances retention by linking new material to existing concepts.

The personalization of the material through frequent use of the students' name and previous responses gives each learner a proprietary interest in the material. Students with such ego involvement are more likely to learn and remember the material, and are more likely to incorporate the salient concepts in future situations.

Lecturing is abstract, but a contrived experience like CAI is much less abstract and very meaningful. I have found visiting lecturers, team teaching, movies, and prepared handouts are other desirable ways of adding variety to the learning process. How these are used, of course, is dependent upon the instructor and the nature of the course.

Positive Charge

A positive, enthusiastic atmosphere is essential in the classroom. It has been said that people differ less in mental capacity than in the ability to utilize the powers they have. I concur.

Many tasks are performed by perserverance, not strength. A positive, highly motivated student believes that it is better to try and carry out an assignment than to fail because he has not tried.

In the classroom, I try to be positive to each question asked and each topic discussed. Each question asked is a good question. Most topics discussed are related to an objective of the course. Sometimes it is difficult for the student to visualize how the pieces of the puzzle go together. The instructor can, and should, provide this assist.

To some extent, one's achievements are determined by what a student thinks of himself, as well as what his teacher thinks of him. A good teacher/student experience can reinforce the student's self concept and create much confidence and motivation.

There is a linkage that transpires between the learner and an enthusiastic, sincere teacher. Not only does the student react to the enthusiasm of the teacher, but the teacher also shares from the enthusiasm of the students. Frequently, two sections of the same course can be as different as a cow path and an interstate. The same lecture format is used, but the uniqueness of the mix of students creates a totally different "learning environment."

Summary

Every instructor has a tool box and a single tool has little relationship to the finished product. For example, it is impossible to examine a cabinet and know the exact use of the rasp or plane alone. The finished product does, however, reflect the skill of the craftsman in combining the use of the available tools.

Likewise, you cannot examine a piece of furniture to learn if some new-fangled power tool or some age old hand tool was used. It is the quality of the finished product and not the individual tool, alone, that is important.

The good teacher coordinates the use of classroom tools and the quality of the finished products reflects his ability as a craftsman.