

Some Experimental Teaching Techniques

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Quality teaching is valued at HSU. Recently, a university-sponsored workshop on teaching effectiveness provided a rich environment for sharing teaching problems and for exchange of successful teaching techniques.¹ The spirit there heightened my enthusiasm for teaching; I felt nourished by the talks of the outstanding master-teachers on the panel and other professors who participated.² Encouraged by the lively exchange, I too participated, and in this article I shall attempt to clarify and extend some of the thoughts I expressed in the workshop.

Maximum teaching effectiveness is realizable when the student is eager to develop him/herself under the guidance of a caring teacher. To bring about this ideal situation, I have found that certain experimental techniques are useful. For convenience, I shall discuss these techniques under three headings: Pre-Instructional, Instructional, and Post-Instructional. During the Pre-Instructional phase, the chief purpose is to devise techniques for taming the wandering mind, and for reducing its agitation so that it may become tranquil, abiding, and ready to receive instruction. In the Instructional phase, the main objective is to sharpen the student's intellect in order to achieve maximum information transfer. For the Post-Instructional phase, a "quarterback sneak" technique is introduced to transform the traditional evaluational process into a lively and yet powerful self-learning tool. The technique is designed to train the student to be resourceful under pressure. This is done by treating the total being of the student as a subjective Management Information System (M.I.S.)³

Pre-Instructional Phase

The major objectives to be achieved in the Pre-Instructional phase are:

- To restore students' good feeling about

themselves and their sensitivity towards others.

- To decrease the classroom tension by re-orienting the mind via the concept of a "living community."
- To reduce unhealthy competition among students.
- To promote effective communication between the teacher and the taught.
- To encourage a meditative pause.

During the first day of the class, I generally ask each new student to briefly introduce him/herself. Besides giving name and major, the student tells of his/her reasons for taking this particular class. This serves not only to "break the ice," but also helps the student to focus on his/her own objectives. Focused objectives lead to personal commitment. The commitment leads to seriousness of undertaking, which often leads to better grades. Each student also talks about his/her favorite sports and hobbies. This tends to open a person up, allowing him/her to be more sensitive to others as unique individuals. Visible personality and talents provide something with which others in the class can identify. Thus, a way is paved for like-minded persons to gravitate towards one another. This is useful for developing new friendships, mutual help in learning, and group studies later. In fact, to stand in front of the class and talk about one's favorite subjects is beneficial, for it is a healthy thing to get some attention and to gain recognition. This also gives the teacher an opportunity to get to know the students and to appreciate them on an individual basis early in the term.

The classroom is not just a room to walk into, sit down, and then walk out of when the class ends; but, rather, it should be looked upon as a precious space in which to live for an hour, fully and enjoyably. Why should we live a passive existence during class hours? Why should we postpone our appreciation of life? Thus, we should emphasize

the concept that the classroom is a dynamic, "living community," where life is to be lived in the here and now, not delayed to weekends or postponed until after graduation. In a living community, it is natural to know our neighbors, to have concerns, and to extend help in times of need. So, I encourage my students to make friends with their neighbors and be open and helpful in every aspect of life. Life should not be compartmentalized or walled in, anyway.

The traditional grading system using curves tends to alienate students from creative dialogue because it pits the students against one another in an unhealthy competition. Thus it is a kind of "zero-sum" game, wherein someone's gain is attained at the expense of someone else. In that game, students are discouraged from helping their classmates to improve, because to help would be detrimental to their own grades. Having experienced this when I was a student, I would like to help my students to be free of this tyranny. I make it clear that each student is to be looked upon, first, as an individual. Therefore, individual efforts and progress do get counted as part of the evaluation. To make sure this happens, I give extra credit to those who help others.

Regarding student-professor relationships, I find that it is desirable to play down the artificial protocols and formality that normally exist between the teacher and the taught. Informality helps lessen tension; besides, it is better to command respect by one's actions than to demand it because of rank and position.

For my late afternoon classes (say 4-6 p.m.), I have found that sometimes my students get quite tired. Their energy is at a low ebb because their senses have been bombarded with all kinds of stimuli and because they have already gone through a full day's activities. This probably is the last class for the day and the mind is reluctant to work when the body is hungry. What can we do with a situation like that? Everything is stacked against the teacher even before he gets started. I have been pondering and experimenting with several techniques for quick re-vitalization of students in this setting.

A technique that I found to work well is what I refer to as the "Meditative Pause." The thought behind this technique is: "The mind is already over-strained, and the body is fatigued. So, instead of exerting more pressures, let the lid off entirely. Thus, one become re-charged. It works as follows: first, I ask the student near the light switch to turn

off the lights. Students' minds suddenly wake up and say: "What's that?"—for the mind is always curious. Then I ask all of them to relax, to ease into a position that would make them most comfortable. The mind is now beginning to unwind. Next, I ask them to close their eyes, let go of everything and think about nothing. After 10 to 15 seconds, I start reading a poem concerning nature or life. Such poems generally have philosophical overtones. They possess rich images for expanding one's sense of life's essence, for broadening one's view upon nature's beauty. For example:

*"Empty yourself
of everything;
Let the mind
rest at peace.*

*Ten thousand things
rise and fall,
while
the Self
watches their return.*

*Returning
is—
Stillness:
the way of Nature.*

*The Way
is—
unchanging.*

*Knowing constancy
is insight;
Not knowing
leads to disaster!*

*Knowing constancy
the mind is open. . .*

*With an open mind
you will be
open-hearted. . ."⁴*

Such readings usually last for two minutes or so, and are followed by a period of silence. Then, I tip-toe to the light switch and turn on the lights to resume class. The whole process lasts about three minutes, but such meditative pauses can be really refreshing! They make the students feel good about themselves again and become more alert.

The Instructional Phase

For maximizing information transfer, a wide range of topics merit our consideration:

- Pre-class preparation.
- Priming the mind and focusing on the subject.
- Instruction continuity.
- Exercising the mind.

To make classroom instruction more effective and efficient, pre-class reading assignments are necessary, for when students grasp trivial matters ahead of time, the teacher and the students can delve quickly into more interesting topics and at a deeper level. Although students know they should read their assignments, they tend to let them slip by. It is a known fact that the mind is basically lazy when there is no tangible reward. In order to avoid this impediment to learning, I have devised a 'mini-test' to assure that students do their reading assignments diligently.

The mini-test is part of my grading system. Although it counts much less than a quiz, I give lots of mini-tests, so that their cumulative effect on grades is important enough to prompt the student to take them seriously and complete their reading assignments before class.

While the mini-test is short in duration (say, about 3-4 minutes), it is always held at the beginning of the class period. It is a test designed to prime the mind, especially for the early morning classes; its effect is to drive away students' sleepiness and make them more alert. In doing so, it prepares their minds to receive instruction.

In addition, a central purpose of the mini-test is to help students learn how to focus on important issues and vital information. It is an effective way to show them what the teacher regards as the most important knowledge to be gained from the textbook. It is a quick way to lift the beginner towards the mental realm of the expert. It also acts as a direct feedback to students on how to read a textbook properly and on how to sharpen and increase their information-gathering capacity. I ask them to compare what they have underlined during their reading with what I asked in the mini-test. This forces them to be more critical in their thought and judgment. I tell them to ask, "Why did I miss the

boat entirely?" or, if they are close to the mark, "Why did I underline so much, when the teacher pin-pointed the essence with a phrase, or in a sentence or two?" To replace vagueness with exactness, is to build discriminating power in the intellect.

As part of the effort to discipline the mind, I make an effort to start my class *on time*. But, for some reason or another, there will always be somebody arriving late, say within the first 3-5 minutes. Such a behavior pattern is disruptive. The late student suffers also because he/she misses valuable information and will have trouble understanding the rest of the lecture. Although one can borrow class notes from others later, it is never the same as getting the material directly from the teacher.

To avoid absence or tardiness at my lectures, I use the mini-test to achieve a two-fold purpose: to give my students the incentive to come on time for the test, and to allow those students whose lateness is beyond their control to come in time for the lecture. In other words, if students have to miss part of the class, I'd rather they miss the mini-test than part of my lecture.

The format of my mini-test is multiple choice, but it is the manner in which the mini-test is conducted that makes the difference. I use an oral presentation and a delivery just fast enough to require alertness. It is my purpose to force students to learn how to listen properly. By that I mean they must capture the phrases, not one word at a time. Furthermore, they learn how to make quick and correct decisions under time pressure. By so doing, they develop coordination among eyes, ears, hands and mind, and exercise memory. In short, the student has to stay on top of the situation all the time during the mini-test. This is a very good way to push the mind into a state of high efficiency and receptivity. As the term goes on I gradually increase my speed of delivery. I have found that, by the end of the quarter, even those students who could not follow at first and could not take notes at all are now sharp listeners and efficient note-takers. These skills will benefit them for the rest of their lives, no matter what path they may choose to take. Their new capabilities will enhance their self-confidence as well.

For classroom teaching, several styles are available, such as spontaneous (motivational) teaching, inter-active teaching, and entertaining teaching. Spontaneous teaching means that within the general framework of his course outline, the

teacher should make room for re-sequencing of local sub-topics as they pop up. That is, the teacher's lecture appears to be following students' questions or doubts which come forth at random. Such a lecture seems to lack smooth linear development. But all the time an experienced teacher knows what he/she is doing, knows the advantage of using student-generated topics in which the motivation already exists. Therefore, an experienced teacher takes advantage of the spontaneous situation in a timely fashion.

Straight lecturing at the blackboard can be awfully boring because it renders the students passive. In order to avoid monotony, and to engage students' minds and intellects, the teacher should draw the students into the lecture-discussion through interactive teaching. Students are thus kept constantly alert, for they may be asked to speak at any moment or even to go to the blackboard to make a point. In a highly interactive classroom environment, the teacher will often find that the problem is no longer passiveness, but over-activeness on the part of the students. The good teacher must be good moderator as well, determining who gets to speak next, preventing the discussion from going astray, and keeping the students on the subject.

Lastly, it is important to recognize that the attention span of college students is limited. I have found it desirable to arrange several topics, each lasting no more than 10-15 minutes, and to treat them in different styles. Like a major-league baseball pitcher, one should always use change-ups to keep students' minds sharp. But since it is also the nature of the mind to want entertainment, humor and wit are important, too. One need not prepare jokes in advance; I found that using words that have double meanings, or words that sound alike is especially attractive. Such play with language is not only entertaining, but also serves as a grindstone for sharpening the intellect of the student, for keeping the mind alert and refreshed.

Post-Instructional Phase

Traditionally, a quiz is merely an evaluation process and nothing more. Students dislike this because they have to cram before the quiz. They are tense during the quiz, and they often get frustrated or disappointed after the quiz because of some silly mistakes. Nor does the teacher fare any better during the quiz; he merely sits there, acting

as the watch-dog. The traditional quiz divides the teacher and the students into opposite camps and creates an unhealthy condition.

Why should quizzes be so unpleasant? Shouldn't there be joy in learning? Because I think learning should be joyful. I have been experimenting, trying to turn the quiz into an attractive learning tool. The technique I have arrived at involves several stages.

The first stage is the straight-forward, ordinary closed-book test, lasting for about 25-35 minutes. The teacher can generally tell when that time is up; it is when about 15 percent of the students become restless. You begin to see their eyes wandering about, their hands moving restlessly. They have done just about all they can accomplish; they have squeezed out all they know about the topics in question. They are impatient and frustrated. This is the right time to announce the end of the first stage, and enter the second, which I call the "quarterback sneak."

Stage two calls for three phases, the first of which is an open-notes session for five minutes. During this period, students are allowed to work with their class notes only. "Really?" the students say, and then, when disbelief turns into pleasant surprise, they madly dash to their notes; they feverishly flip the pages back and forth to zero in on the target information. Talk about joy! You see it in their faces when, digging in their notes, they find what they need to write the perfect answer. "Knowing" is a joy in life, and "to be perfect" is a basic human instinct.

Five minutes seems so short! Suddenly, it's over. It is meant to be. The students have become keenly aware of the importance of well-written and well-organized lecture notes. They have learned that knowing the whereabouts of vital information is of more value than memorizing that information. At the end of stage two, all lecture notes must be put away, and then stage three begins. This calls for opening the textbook for three minutes only. From this opportunity the students learn that, unless they have well underlined the text beforehand, it will not be very useful now.

When stage three is finished, they close their books. Then comes the last stage. Wide-eyed, students begin to wonder what could that be? Open neighbors! And for one minute only. The student is put in a situation where he/she has to decide what the most important question is as well as how to express it clearly and concisely since time is at a premium here. It takes great skills to master these

and it is by no means easy! I certainly appreciate this truth from my personal experiences as an international consultant. I learned the skills the hard way. How I wished that these skills were taught in school.

To summarize, the benefit to be derived from stage one is that students learn how to retrieve information at the fastest rate possible from their memories. In stage two the students learn the value of listening attentively to the lectures and of organizing their notes. In this stage they also learn the meaninglessness of cheating. That is, if someone has "cheated" during stage one, he/she now can't help feeling silly and ashamed. The students awaken, through this teaching technique to the realization that learning is important for its own sake and that to become an independent thinker is a joy.

The benefit to be derived from stage three is that students seriously undertake their reading assignments and learn the art of underlining important passages, which further enhances the development of their discriminative powers. This skill also leads to high-speed information gathering. If I can save 50 percent of the time for every book I read, just imagine how much time I will have saved in a quarter, in a year, in ten years!

The benefit from stage four is that students learn to be resourceful (i.e., to get information quickly from anybody). Human resources are often more valuable than other resources because, as compared, say, to books, humans often have the most

timely information available. In stage four the student learns the art of asking the most pertinent questions within the shortest available time. An important side-benefit of this stage is that the student learns to be friendly and to cultivate friendly neighbors, who will give help in time of need. This appreciation for good neighbors leads one to become more open-hearted and generous towards others. In short, it leads to a better, more gracious life.

How have my students responded to these techniques? Very well, I am happy to report. One student said, "That's neat," another said, "Exciting way to learn," and yet another said, "I've never learned so much as in those few minutes." It seems to me that the "Quarterback Sneak" has yielded a gain for my students and for myself.

NOTES AND REFERENCES

¹The workshop on Teaching Effectiveness was led by Professor Roy Ryden at HSU on April 19, 1980.

²The Master Teachers of the panel were Dick Day, Ted Ruprecht, Jim Smith, John Travis, and Dick Botzler.

³"Management Information Systems," R. McLeod, Jr.; SRA, 1979.

⁴"Tao Te Ching" (of Lao Tzu). G. F. Feng and J. English. Vintage, 1972.