

Chapter A-3

Let students work; ask questions denoting relationships

By Guy Bensusan

When I first began college teaching, I did it all! I read the chapters I assigned, wrote out all the lectures (including stage directions of louder here, slow down here, and pound the rostrum), rehearsed in front of a mirror, and then delivered. I wrote test questions, conducted pre-test reviews, administered, corrected and logged them (always disappointed) and then moderated the post-test feedback sessions --- and from all those handlings of the subject, I learned it thoroughly!

One might ask, "Didn't you know it before?" I would have to say no. I had been trained in Colonial Caribbean History, but the only job I was offered was in Introductory Humanities --- meaning (said the small college president in Northwest Missouri), a survey of art, music, literature, drama and religion of Western Civilization from earliest times. I had had no training in those, but with a pregnant wife and no other job prospects, I went to work.

My point in telling this story is that in the classroom I was not an expert telling of his expertise, but rather a learner who was only a few pages ahead of the learners he was teaching. I felt very sorry for myself and begged for a course in Latin American History. Fortunately, it was not forthcoming, and I continued to receive the blessings of whatever higher power put me in that situation, even though I considered myself victimized at the time. I eventually became a far better teacher of humanities than of history, in large part because I had been taught the latter and had learned how to learn the former.

The contrast was amazing; with humanities I came to feel a degree of mastery over the many components, techniques, messages and attributes, cultural contexts and points of view. With history, I felt expertise in facts, names, dates and strategies. I knew many things about the history, while instead I felt the humanities. It was a disquieting disparity, and after moving to Flagstaff to teach in both departments, I began to see and became able to describe the duality of my scholarly persona.

Eventually, I engaged in some fusion, by team-teaching with a fellow from literature. He had a marvelous sense of components and analysis: able to take things apart and reassemble them with an easy clarity I envied. At the same time he lacked any notion of where things came from, related to, were caused or would have consequences on. We were a great team, and got along well; eventually he learned historical dimensions while I added component analysis skills --- to our mutual benefit as well as to that of students in our courses.

How does this relate to this chapter? The idea was that when students would do the work, they would learn, though it later became obvious to me that just assigning reading was not enough. They did poorly until I gave a hand by writing study guides, pointing out the places where they needed to pay attention. I

realized from the experiences of teaching swimming that I had thrown them into deep water to sink or swim rather than getting in there with them and talking about it. That was another leftover from graduate school, where I had allowed the professors to convince me that physical activity required coaching while academic cognition required transfer of knowledge.

It was obvious that a definite but fine line existed between performing for the audience of students and providing them with learner-centered help, practice and guidance. It took time to get over being the expert, and the first study guides I wrote were of polysyllabic phraseology and erudite explication (I keep those things around just to remind me how insufferable I must have been). I kept on performing for the students, showing how bright and clever I was in my lectures, rather than focusing on fulfilling their learning needs. It must relate to ego, insecurity, or the need to be noticed, but it also is part of the professorial culture reinforced continually by peers. Slowly I began to understand that the most helpful tools I could provide were my understated, subtle, insinuating questions that directed a bit of light on the topic, inquiring into relationships between A and B.

It became apparent that an entire world of learning-to-help-learners existed for me, the teacher. The interlace of structures led to the creation of the models and tools such as The Hexadigm, The Ladder and Bias, described in the previous chapter. In the earliest days of my working with these things, however, the concepts and tactics I had were embryonic. What I knew came from the experience of trying something in the classroom, and it always seemed that if I put a painting, musical composition or poem in front of students and asked them to de-construct it into components, I would get one type of useful response, and if I placed two paintings, songs or poems next to each other I got comparison instead of analysis, and when I went back and forth between those, a constructive retroduction began to emerge and build on top of both the induction and deduction. What a discovery!

It was both a revolutionary breakthrough and a useful box of tools. No longer did I have to tell students what to look for and hope they would find it. Rather I set up a learning situation for them to discover as I led them through layers of thinking in response to my questions. No longer was I getting pleasure from demonstrating how smart I was by telling them with clever presentations what I had learned about the subject. Now I was gaining a deeper personal satisfaction as a helper of learning who asked, watched, asked some more, listened, asked again, and then redirected a different question, always aimed at another direction of inquiry that would lead to their finding a new piece in our topic which had not been previously perceived.

Is it not clear from this that while students must do the learning, the teacher remains vital to the process? I cannot see any possibility of the helpers-of-learning being replaced. A personal and human relationship exists here, in spite of the technology. The idea that "Teaching" relates to lecture, which has become a dirty word, is most unfortunate as well as erroneous. Teacher as

posturing presenter and data-dumper is one thing, teacher as a guiding learner-helper is another. The teacher is experienced, has already done the learning, and knows what has to happen, assuming that personal ego, professional reputation and the sophisticated ability to subdivide distinctions (which comes with expertise), do not interfere with learner-helping.

The teacher writes the text, prepares the activities which will evoke the learning, establishes the sequences of ascending levels of inquiry, moderates the heated discussions while pointing to (rather than telling about) possible resolutions, keeps the peace among learners who are treading different paths (or the same path with different assumptions), assuages the frustration with the blockages in thinking through personal anecdotal evidence, points to alternative possibilities, provides illustrations, and so on. And most important, these must be accomplished without the teacher occupying the limelight too much, or too long. I do not mean that one must have false humility, but attention must be focused upon the real goal, on the learner, and on helping learning take place.

On the other hand, the teacher must also stay on top of what is developing in the classroom. As learning occurs, students will go through necessary ups and downs, through swells and troughs of understanding and progress. A day will come when what had been dialogue between teacher and student breaks loose in a different social dynamic, flowing freely as students debate with each other, none having raised their hands for recognition from the teacher. It will move fast, go on for a long time, and then suddenly stop --- as everyone looks at the teacher to see if it really was okay to do that. It has to be okay, doesn't it, since the teacher is (or should be) trying to turn the learning over to the students. But when the students stop in stunned silence to observe the professor's reaction, it is then that the learning-centered teacher can step in with the appropriate question which will restart the debate.

A relationship inquiry usually works, as in, "Wonderful! What are the main points we covered there?" Or, "Good, and where are we on the Ladder or Hexadigm with that?" Wherever the dialogue is flowing, let it go! It will undoubtedly NOT go where you want it to, but it is going where those students need to take it at that moment. They will stick with what they need for as long as they need to and when they are ready, the conversation will take another tack. The teacher's job is to keep them thinking about the various points they need to consider as they go along. You will see this when, after having interjected, "Well, what about the geographic factor?", a student responds, "Yes, that's definitely part of it, and the elevation has more impact than the topography!"

On the other hand, the wrong question can and will stop the discussion cold. Teaching-centered teachers often ask factual rather than relationship questions, and it often gives the feeling to students that they are being observed and tested. When they feel that the discussion is being carried on by themselves in the company of someone who is grading them, the flow will not go. When instead, they feel that the teacher is also a member of the dialogue or multilogue, then what emerges is more of a brainstorming session. Thus, rather than ask, "What

were the biological consequences of 1492?", which may result in a very long pause, it might be more useful to set it up in another way, such as, "When Spanish men came to the Caribbean and brought their plants and animals, what kinds of things would have happened to have brought about change?"

Questions serve as an onramp to the freeway of expanding inquiry, especially if they are open-ended. It doesn't matter whether the initial expedition into the extensive hinterland of the topic goes very far the first time. When a door has been opened, you can always come back to it. After all, in our teaching-centered world we have been trained to be thorough, but in discovery, you only learn a bit at a time, and usually pause when you are full. In some cases it takes only five or six new pieces of information or ideas --- is that not just about all one can handle? Research suggests this to us, and our Instructional Designers tell us constantly not to make things too complex, but only to provide enough important points so they can be quickly remembered. You can do more on the next visit, and an entire chapter on this is in A-4.

As a matter of learner-centered strategy and continuity, it is a useful approach to start each class meeting with a recapitulation question: "What did we finish up with last time on the matter of the initial encounter between Spaniards and Indians, and what the human and flora-fauna consequences were?" After the student recap, an appropriate question might be, "Did anything else occur to any of you after class?" (which carries a suggestion about outside activities, as mentioned in Chapter B-4). It also opens the door for continuation of the useful classroom dialogue of the previous session.

Whatever anyone brings up is fine, even if they be wrong. If they are wrong, the worst thing one can say is, "No, that's wrong, you are mistaken!" It will silence the one who spoke and will inhibit the rest. It is far better to say instead, "That is a useful response, and we should look into the implications of that idea." Embarrassing a student gains absolutely nothing for the teacher, except to some, a strange moment of self-satisfaction. (More about that is to be found in Chapter C-3.)

In all of these activities several accomplishments are noticeable; students are active rather than passive, they are handling the information in useful ways rather than recording information for future learning, and they go beyond the data itself into other levels of inquiry about causes, consequences, alternative explanations and different ways to prioritize importance. But they will need time and many revisits in order to get where they need to go. In facilitating this, the professor has automatically shifted roles: no longer the provider of information, but rather the helper of learning. Restating the parable, instead of giving the fish to the students so they are provided with one semester's meal, the teacher has shown them how to fish for themselves, and let them practice, promoting long-range consequences.

One may object here that the course content material is not being sufficiently covered and that the inefficiency of this methodology makes it wasteful. I would argue just the contrary. The efficiency is much higher in this method because

we are discussing learning, not lecturing. Lecturing is clearly efficient for the lecturer and for experienced lecture-listeners who are well acquainted with the process, but not for novices or people whose cultural heritage lies outside the long traditions of the university. One argument for university teaching might well be the preparation and training of lecture listeners, though even then the instruction would not fit all needs.

Changing behavior and evoking behavioral change takes time, effort and struggle. This is true both for the teacher as well as the students. Many students, when they find a teacher in front of the class who is not doing the expected things, assume that teacher is shirking his job, not performing the task he is being paid for. Helping students shift over to self-learning takes patience, encouragement and constant genuine helpfulness. If it is not sincere it will be recognized, because egos and grade averages are at stake. This is a transition period for students; they already know that learning is their responsibility, but they generally have not been allowed to do it, are not used to doing it, need to make sure you really mean it, and require some initial help in overcoming their inertia.

The key may well be that you are always there for them, that you always greet their attempts with a positive and encouraging remark, that you praise the obvious advances which they have made since the previous time you had this discussion and that you always indicate by some inferential comment that you can see where they are headed with what they have shown you. And finally, always ask another question --- not one that will pose an insurmountable challenge, but only one which will intrigue them to take just one more little step.