PERSONAL STATEMENT

Several years ago, a former student walked into my ALS 176 class just as I was about to start the lesson. With no warning, she turned to the 80 students in the class and told them that she had complained constantly when she had taken the class two years before, that she had never been required to work so hard in a course in her life, and that now when she was about to graduate she realized it was the most important course she had ever taken at Oakland. She turned to me, thanked me, and walked out. The class was stunned, and so was I. We were studying syntax and the students had been struggling for some time. The sudden, apparent vindication from a former student could not have come at a better time. Still, her unannounced outburst was so timely that it appeared as though I had staged the entire incident.

I try to remember that day when things don't go well in class. I also carry in my briefcase four tattered thank-you notes from former students, and I have a folder among my email directories labeled "Hope." When I'm feeling particularly desperate, I reread what Professor Hildum wrote in his summary of my teaching evaluations for my promotion to full professor in 1985: "Prof. Binkert should not be described as a 'popular' or 'entertaining' teacher. But a rather impressive number of student evaluations volunteer that he is the best teacher they have had at Oakland. From what I saw in his class, I am not surprised."

It may seem strange that a veteran teacher about to enter his thirtieth year at Oakland would need to be reminded that he has done some good. Well, I do. I expect as much from my students as I give to them. My own effort is considerable, even in a course like ALS 176 which I have taught more than 60 times. As a result, I am often judged as too demanding, and there is a lot of pressure to lessen requirements. It takes stamina to maintain standards in the face of student efforts to reduce or remove them. Since I can't compromise either my discipline or my principles, I try to remember the students who have reminded me that the rewards are worth the effort. And so, I reread evaluations from grateful students. It helps.

Students today are very different from those that came to Oakland in1970 when I started. More than anything else, they are busier. They have spouses, children, full-time jobs, and many other obligations and interests that displace education from a position of top priority. If teachers are to maintain high standards, they need to accept that reality and find new and better ways of teaching. When students one term fail to grasp something that students have grasped in previous terms, it is not time to drop the topic from the course and rue the fact that students are not as good as they used to be; rather, it is time to come up with a new approach. Change is time consuming, but necessary. It can easily take an entire evening to redo a simple handout with just the right examples for a new class – ones that are clear, unambiguous and definitive. It is true that students today often require more help and guidance than those of thirty years ago. Again, that is simply another reality that we teachers must accept. If we don't and if we fail to do what we can to maintain a high level of academic achievement, then we become part of the problem.

There are a number of simple things that I do to help today's students. First, every class begins with a brief recap of where we are in our discussion, with particular attention to how the detail we've been working on fits into some big picture. Second, each class is accompanied by a detailed handout which contains the data, issues, and major points under discussion. These handouts free students from the burden of rapid note-taking and allow them to concentrate on the substance of the issues and problems. Third, homework is assigned on an almost daily basis, and students must write at least two essays out of class. In ALS 176, for example, students must complete ten of twelve exercises, ten of twelve problems, and two essays which require them to provide original data to argue some linguistic point. Fourth, and most important, exams are designed to be learning experiences themselves. Sample exams from past semesters together with answers are placed on reserve at the library, so that the guesswork is taken out of studying: there is no doubt about what I expect students to be able to do. Note that the word is *do* not *know*. The old exams give students practice. On their particular exam, the same skills and abilities will be tested only with new data. In general, I do not test students on their knowledge of facts except when those facts are necessary to reach generalizations; people can always look up facts. I test students on their ability to think and reason, to analyze and synthesize, to evaluate, find appropriate applications, measure relevance, and make good choices.

Overall, my classroom approach is inductive, not deductive: I try to act as a guide, helping students figure out how to solve a problem and discover by themselves the principles that describe the data under investigation. The approach requires participation, perseverance, and the ability to cope with uncertainty.

Participation simply means that there must be a lot of class discussion as opposed to straight lecture, even in a large general education class of 80 students. I keep reminding students that education is a participatory activity, and that they will not learn unless they engage with the process. Consequently, no matter how many students there are, I learn their names. That not only makes each student feel like an individual, it helps me to know them and evaluate whether or not what I have done before is going to work this time around. And it helps to keep the discussion moving: when I see students whose expressions seem to indicate that they have an idea on how to proceed with an issue we're considering, I can call on them by name. The atmosphere is friendlier and less threatening, and the students get to know each other and are more eager to contribute. That leads to study groups outside of class, which are very important to the learning process. One of the best ways for a student to understand something is to try to explain it to someone else. So, I help them set up group study times in the library all during the semester and especially before exams.

Learning by induction also requires perseverance. Generally, students expect problems to be readily solvable, and they are quick to blame themselves or me or someone else if they can't find the right answer in twenty minutes. Complexity often paralyzes them because they have few tools to break down problems into manageable parts. Yet, most of the problems facing individuals and society nowadays are complex and resist simple solutions. As a result, I try to provide students with skills for outlining the parts of a problem, prioritizing those parts, and accepting the fact that there might be left-over issues. Many of my classroom activities focus only on organizing data and observations into discrete groups with something in common. Frequently, I give students data which can be described in several ways and then compare the different descriptions. Sometimes I include

deliberate typos in the data to help students learn to deal with outliers. I show them that a well-supported solution which covers most of the data is preferable to a poorly justified approach which tries to include every last exception. After all, exceptions might be misunderstood cases or just plain typos. It is by thinking one's way through a problem that one really learns, and false starts are to be expected. Arriving at the answer is not always the most important part. It is what one does to get there that is really significant.

But the hardest part of an inductive approach is helping students cope with uncertainty. Students often wonder how I can expect them to solve certain problems without telling them how to go about it ahead of time. But that is the point. Real learning is like research. When people do research and attempt to find an explanation for something, they are often working in uncharted territory, having to make up procedures as they go along. Students need to have practice and experience dealing with unknowns, with problems that have no clear answers, and with evaluating competing approaches to find the best one for the circumstances. I know we have made progress in class when some of the students begin to accept the fact that some problems have no definitive solution. The learning process should not be so frustrating that students get completely overwhelmed and discouraged, but it should be an exploratory and inventive process, not a rote exercise. Students need to understand that removing all frustration from the learning process creates an unreal situation in the classroom and does not provide them with coping strategies to function in the real world outside of the classroom.

Initially, many students find an inductive approach frustrating; they would prefer that I tell them what to memorize and then test them on their recall. But memorization is not learning, and knowledge is not constant. We discover and uncover new phenomena every day which require changes in existing explanations, theories, practices, and methods. I emphasize the fact that there often are no right answers, only what we know at any given moment. And I explain what I believe to be my function in their education, namely, to bring them to the point where they can continue to learn on their own without me to guide them. In short, I think that teachers should strive to make themselves unnecessary by making their students self-reliant. If a few courses that students take during their education attain that outcome, then I think students have a lasting model for life-long learning. I'd like to think that my courses reach that level for some of my students.

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Essay for the Oakland University Teaching Excellence Award