Reflection on Current Issues in Teaching

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1 Workshop Description

I attended the two hour workshop, "Current Issues in Teaching", on Friday, October 22nd from 12:00 PM - 2:00 PM in Research Building III, Room 230. Approximately 20 people attended the workshop, from a diverse group of academic disciplines. The purpose of this workshop was to examine the current issues affecting teaching today, particularly in higher education. The format of the workshop involved active discussion and debate on various topics, beginning with the responsibilities of the students and professors, to topics such as distance learning, and for-profit models in higher education, to name a few.

For the debate portion of the workshop, the four corners of the room were divided into "strongly agree", "agree", "disagree", "strongly disagree". Participants would move from one quadrant to the other depending on their feelings towards a particular topic.

I was then presented with an article, "The problem with college? Too few customers."[1], which argues the position that positive education reform can occur when we begin to treat students as consumers.

The lead presenter utilized Prezi[2] as an alternative to PowerPoint.

2 Workshop Details and Analysis

It is clear from the the workshop that there are a great many number of issues in teaching, and that it would be difficult to provide a meaningful analysis on all of them. Instead, I have a chosen a select list of topics, and apply the discussion topics to my experiences at NC State.

2.1 Evaluation of Faculty

While discussing bonuses for "good teachers", one of the issues that came up in the workshop was that of the evaluation of faculty. Many students feel that the final course evaluation at the end of the semester is not taken seriously by the administration. As a student, I also

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[1] http://chronicle.com/article/The-Problem-With-College-Too/64357
[2] http://prezi.com/

feel the same way. In addition, by the time the final evaluation is done, it seems that it is already too late to make any course corrections for that semester.

During the workshop, I learned of several ideas that could be implemented. The first is to have more feedback throughout the semester. Instead of a final course evaluation, perhaps a monthly survey to determine how the students feel about the course could used. In this case, students who have concerns about the course could potentially see their changes implemented during the semester that they are in the course, rather than helping only future students.

The second is idea is to make course evaluations public. All too often, students do not have good information on which faculty best fits their learning style, and administrators are not eager to share information on this. In fact, after the workshop I decided to look at the MyPack Portal to see how easy it is to find this information. The results were disappointing. It seems that only grade distributions are available, and even then, only for certain classes. I also found that some faculty will post distributions and evaluations on their course web site, but this is rare.

I think this new information is important because it shows that there is information asymmetry in our education system. One reason that students are dissatisfied with certain courses is that they do not what they are getting into. This additional information would make them more "informed" as a consumer. If this information is made public, the administration may find that students are less likely to enroll in courses with certain professors, and this may help increase the quality of teaching in a department.

With this information, I plan to provide monthly surveys to the students. In this way, I will be able to get early feedback from the students. I also plan to take some of the student comments and address them in class. In doing so, I hope that students will see that I have an active interest in their concerns and that I take them seriously.

2.2   Distance Education

A hot topic is that of distance education, primarily because it does not require the student to be physically in a classroom, nor does it require the student to watch a lecture at a particular time. This topic is important to me because I did my Master's degree at NC State entirely by distance, through the Engineering Online[3] program.

In the workshop, we debated the idea of public non-profit institutions versus private institutions. I feel that the Engineering Online program is an example of where non-profit institutions are heading towards a more for-profit model. For instance, I found that in many distance classes, the lectures had been pre-recorded from a prior semester. The tuition rates of distance courses also exceed that of live classrooms, which does not make much sense to me. Finally, pre-recorded lectures are locked away behind authentication. If we are truly interested in education for the public good, then it seems to me that we should adopt a style more like MIT OpenCourseware[4], where our lectures and content are made available to the

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[3]http://engineeringonline.ncsu.edu/
[4]http://ocw.mit.edu/

public at large. Our current approach at NC State feels more like a for-profit model; only those students who can pay can learn the material, despite the fact that there is very little overhead in copy existing lectures online.

After the workshop, I did some research on this topic. In addition to MIT OpenCourseware, I found individuals who have created non-profit organizations like Khan Academy, where lectures are made available for free online to anyone.

As a result of this, I plan on doing what I can to make content open for all. Lecture notes and homework assignments, for example, will not be hidden behind authentication wrappers. In addition, I plan on making content from previous semester available. In this way, students can see how the course is evolving overtime. A common criticism heard in the workshop was that instructors often don't stay current and don't change their course content to reflect new ideas. This would allow students to see that I do so.

2.3   Handling Large Class Sizes

A third issue is that of large class sizes. I feel that we do a disservice to our students by injecting them into a large classroom environment at a time when they most need individual attention. Without a basic understanding of mathematics, for example, it is incredibly difficult to understand the more advanced concepts in engineering. Yet, at this critical juncture, we jam students in packed auditoriums where it is nearly impossible to ask questions or interact directly with the professor.

Unfortunately, most of the attendees at the workshop felt that without the support of the administration, little can be done by an individual faculty member in this area. I noticed, however, that Dr. Honeycutt mentioned a program called First Year Inquiry (FYI).[5] I find this to be an ideal approach to learning, though it currently seems like there are very few course offerings in this area. I am hopeful that more courses will follow the FYI format, namely, in Engineering.

This is an important issue to me because I feel that I have been directly impacted by it. As a PhD student, I still feel that there are certain fundamental topics that I do not have a good grasp of, and I can attribute part of this to the nature of the auditorium style of lecture.

While I can do nothing about large class sizes, I believe that we can make use of technology to at least help address this problem. I intend to use public messages boards and technology such as instant messaging to make myself more available to students. One option that I had considered is to allow students to instant message me during class. That way, if they are uncomfortable with raising their hand and speaking in front of a large audience, they can still send an instant message and I will still be able to address their question.

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[5]http://www.ncsu.edu/firstyearinquiry/faqs/faq_faculty.htm

2.4   Students as Consumers

In my final point, I wanted to look at two articles presented in the workshop. The first is "BC Law student asks for money back". The second is "The problem with college? Too few customers." Out of the many issues covered, I found this one to be the most thought provoking. Part of the reason is that as an undergraduate student, I might have strongly agreed with the positions in these articles. Yet, now that I am on the other side (as an instructor), I find that my position has changed to the opposite end of the spectrum. So what has changed? And in recognizing what as changed, perhaps I use this realization to positively help my students understand my position as well.

Thinking back, I find that as an undergraduate student I was focused much more on grades than I was about learning. In turn, I was often disappointed with courses where I received poor grades, and content with courses where I receive a high grade, regardless of the course content. In hindsight, I see that grades are not given, but earned. In those classes that I did poorly, it was easy to blame the professor. It was not easy to admit, however, that I did not attend office hours or see the TA when I had issues, that I waited until the last minute to complete assignments, and that in some cases, I did not even attend lecture. So how could I blame the professor when I didn't even go to class? It doesn't make any sense to me now, but that is exactly the mindset I had as a student.

In the workshop, we made the analogy that taking a class is like buying a car. But I find that this analogy is not a good one. It is easy to say whether or not we are satisfied with the purchase of a car, but teaching is fundamentally different. For instance, do we expect the car dealership to teach us how to drive? And if we did, how would this change the dynamics of a purchase? For example, what if we had to take an exam before we could, say, purchase Internet service? Or if we had to demonstrate knowledge of music before buying an iPod. I think you see the point. Just because you can drive a car does not mean you can build one. Higher education is designed to teach us the latter, not the former.

The second article is about a law student who wants a refund because he or she was unable to get employment after work. In my opinion, a University education is not and should not be a vocational school. That is not to say that vocational training is unimportant. It is important, but there are other avenues (such as company training courses) to address these goals. While higher education can help you in your career, its goal should not be to train you for it. The knowledge you gain in education should be timeless and more fundamental. I believe it should be more theoretical than practical. Practical knowledge helps you now, but it might be obsolete (and in computing, will definitely be obsolete) by the time you graduate. On the other hand, a good theoretical background allows you to adapt to any changes in industry. While we no longer program in FORTRAN or COBOL, and today program instead in C++ or Java, the underlying theory of programming has hardly changed. The principles of programming in 1970 as just as relevant today.

I think that part of the problem is that this connection is not made with students. They think that a University education is out of date or impractical to their every day career, when it is not. For example, in my undergraduate education, we used a programming language called Smalltalk, developed in early 1980. That is before I was even born! At the time, I

was incredibly upset that we were not learning something "modern" like Java. Why am I wasting my time with this? Years later, I find that Smalltalk was not really that different from Java anyway. It was not difficult to pick up the modern language, since the concepts had barely changed. Indeed, one of the main benefits of Smalltalk was quite stable, having had so many years of development. If we had used a modern language, we might have had to spend our energy wrestling and working around bugs in the system, rather than learning the core material.

As an instructor, I hope that I can convey this message to students. One example I thought of was to do a comparison of new technology with "old" technology and demonstrate how the fundamentals concepts are still very much the same. It is also important to impress upon students that older technology is a building block for new technology. That is, unless we understand the history of how a concept has evolved, we will not be able to appreciate the modern concepts that we use in practice today. Perhaps I can even offer an assignment every semester that asks students to look at new material and compare it with old material, and then determine for themselves if that much has really changed. I would also like students to look back at technology, say five years ago, and have them see which of these technologies are still in use in their current form. The answer is likely to be "very little".