CASE **T**EACHING **N**OTES

for

"Paul Seymour, Assistant Professor: A Dilemma Case in Teaching"

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Introduction / Background

This is a realistic case that poses two important issues that confront many faculty when they first begin to use case study teaching—or for that matter any novel teaching method—early in their career. The first issue is how to introduce a new method into the classroom successfully where both the instructor and the students are novices. The second issue concerns the possible consequences of focusing heavily on teaching in an environment where teaching is not the primary criterion for promotion and tenure.

The case was written as an exercise for faculty attending case study workshops as a way for them to evaluate some of the major problems facing young faculty when they try out new teaching methods. The case works well in any faculty meeting, such as a luncheon seminar focused on the problems of teaching.

Objectives

- To examine some pitfalls in teaching case studies, especially where students are accustomed to the lecture method.
- To examine the main forces that impinge on young faculty who are at a university or college where the focus is on research rather than teaching.

CLASSROOM MANAGEMENT

The case is short and can readily be read in a few minutes. In a workshop situation I ask the faculty to work in groups of four to five people. I ask them to read over the case and then in groups to look at the situation from different vantage points. I typically ask one group to look at the problem from Paul's viewpoint and another group to analyze the case from the vantage point of the Chair of Paul's department. A final group I assign to look at the situation from the perspective of Paul's Dean. Other possible groups can be established: Paul's colleagues, the students' parents, the granting agency, etc. If there are many participants in the workshop, I will have several groups playing each role.

When the workshop participants are finished reading the case, I ask each group to consult with their teammates to see if they can reach a consensus as to how they might react in their roles as Paul, the Chair, or Dean. Then I as a facilitator run a general discussion.

First, I ask the group that is role playing as Paul to give us their thoughts. "He" usually talks about his concerns about teaching and defends why he is teaching in this new way, making the point that he is adapting as he goes and that things will get better in the future with a few adjustments.

Then I say to the Chair group, "Suppose that you have a student that comes to you and complains about the teaching of Dr. Seymour, what would you say to the student? The "Chair" typically replies that "s/he" will look into it. I then ask the "Chair" what else s/he might do? The group usually says that they would

talk to Paul to indicate their concerns. This usually spills over into a conversation about Paul's tenure and promotion issues and brings up the fact that his dedication to teaching might jeopardize his career. I often ask someone in the Chair group to have a conversation with a person from Paul's group. This is a role playing experience that is played out between two individuals in a realistic fashion.

Following this exchange, I turn to the Dean's group and ask: "Suppose that you had a contingent of students come directly to you and complain that this new professor, Paul Seymour, is not teaching them anything. He is expecting them to do all of the work. Moreover, he is jeopardizing their acceptance into medical school by inflicting this unorthodox teaching method upon them. Given this, what would you do?" Typically they respond with appropriate Dean-like statements such as "I'll look into it." And when they follow up with a phone call to the Chair, the Chair responds by saying s/he has already talked to Paul, etc.

By working back and forth between groups, I as a facilitator can expose the key problems that Paul and the administrators face. Ultimately, Paul must come to grips with his dilemma. He has some choices to make: modify or radically change his behavior or face the consequences. What are the issues and what will (should) he do?

MAJOR ISSUES / BLOCKS OF ANALYSIS

There are two key issues in the case: Paul's difficulty with the new teaching methodology and the fact that his research program seems to be in jeopardy.

Teaching Issues

As far as the teaching issue goes, Paul is experiencing many of the same problems that all instructors face when introducing new methods, in this case Team Learning and case studies (Herreid, 2002). There is always student resistance. For students, the novelty factor often makes them worry that their previous methods of studying might not work. This is a serious threat to students that have been successful with traditional methods. So Paul needs to spend significant time at the start of the semester explaining his reasons for the new methodology. And this must be done more than once. He needs to mention that cooperative learning strategies lead to better grades not poorer grades. He needs to make that point by saying that over 1,200 studies have been done showing that groups outperform individuals, that students using cooperative methods retain the information longer, are more articulate and more tolerant of diverse views than students in lecture classes (Herreid, 1998), and that learning to work together in teams is essential for success (surveys of CEOS indicate that 90% of the people who are fired from their jobs lack people skills), etc.

Paul, as a new teacher, has another thing working against him. He does not have a long history of teaching experience to fall back on. Young teachers encounter a host of common student problems and excuses. The instructor will eventually figure out how to solve and answer these. But in the beginning, s/he can be at a loss. What should the instructor do when a student is tardy or hands in a paper late or claims he can't take an exam because of a death in the family or has to appear in court or ... or ... or? Eventually s/he will have answers, but in the beginning, coming on top of trying out a new approach to teaching any vacillation on the part of a new instructor makes her/him appear weak and incompetent—easy prey for a suspicious and argumentative student looking for a scapegoat for an inadequate grade or unusual assignment.

A key sticking point for students is the group activities and especially the peer evaluation. Many good students have been stuck in poor groups where they have felt abused and have ended up having to do all of the work. They hate this. Moreover, they hate to depend on other people and their different time schedules. Students find it very difficult to meet to do group work outside of class, especially given their work and

family schedules. There are ways to avoid or reduce the difficulties. One of these is simple: don't assign outside group work.

Second, always create group assignments that are either too large or too complex for a single student to accomplish in the time allotted. Students get rightfully galled if they see that they could accomplish the task faster and more efficiently working alone.

Third, be sure that students understand the role that peer evaluation plays in their grade. They need to see its value; it gives them an opportunity to be sure that everyone is doing their bit in group projects. Peer evaluation must be described on the first day of class and the forms used for it shown. The students must have a chance to do a practice peer evaluation part way through the semester. This practice evaluation allows students to see that any individual that is not pulling her/his weight in the group projects will be punished by their teammates. This gives the social loafers a "reality check" and provides them an opportunity to rectify their behavior (for details on how to conduct peer evaluations, see Herreid, 2001, 2002).

So what are Paul's options? These should be explored and evaluated in the seminar or workshop setting. There are short term solutions and long term. He can give up the new teaching style altogether or he can try to make adjustments on the fly. If he is going to make adjustments, he should consider involving the students. One solution is to suspend normal class activities one day and have the students working in their groups: (1) list the positive things that have come out of this new approach and then (2) list concerns they have about what is happening in class. If these group papers are handed in, Paul will have a chance to evaluate the points. It is usually not wise to open up the class for discussion at this point. Tempers need to cool. In the following class, Paul should address the key issues, clarifying problem areas, discussing how he will or will not modify his procedures, and explaining the reasons for his decisions. This direct approach will almost invariably reduce the tension. Even though not everyone will be happy, the problems are no longer smoldering in the background undermining the class. Paul has shown his concern and taken the students seriously and should be able to survive the semester. In the long run, if Paul is going to experiment, he will need to correct his approach the next time around, that's for sure.

Research Issues

As far as the research issue is concerned, Paul is in serious trouble. He apparently is in a Research I University. He was probably hired largely on the basis of his research potential and he is beginning to slip. His tenure and promotion seem to be dependent on grants, publications, presentations at national meetings, and giving research seminars. Teaching typically is given short shrift in this setting. Indeed, in some university environments, receiving a teaching award may be the kiss of death. Paul has been captured by the allure of teaching and has found that it takes a major commitment to be good, especially if he is going to move away from traditional lecturing. He simply must face facts. The talks with the chair, colleagues, and perhaps the dean will help him get a grip on reality. But, make no mistake, this is a crisis. If he doesn't make major adjustments in the way he spends his time, he will be looking for another job soon.

Among his choices: he can give up the new methods altogether or more likely he will try to modify his teaching somewhat hoping he can still be successful in his teaching and continue his research. He wants to do it all. But there is another alternative, of course; he can always choose to go elsewhere, to a teaching institution and chuck the research career—but as young assistant professor and productive researcher he is unlikely to come to that conclusion at this point in his career.

If you were Paul Seymour, what would you do?

REFERENCES

Herreid, C.F. (1998) "Why isn't cooperative learning used to teach science?" Bioscience 48:553-559.

Herreid, C.F. (2001) "When justice peeks: Evaluating students in case study teaching." *Journal of College Science Teaching* 30:430–433. Also available online at http://ublib.buffalo.edu/libraries/projects/cases/teaching/justice.html

Herreid, C.F. (2002) "Using case studies in science—and still covering content." In *Team Based Learning:* A *Transformative Use of Small Groups* pp.109–118. (Ed. L. Michaelson, A. Knight & L. Fink) Praeger, Westport, Conn. Paperback edition (2004) Stylus Pub. pp 105–114.

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