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Preparing Faculty for Pedagogical Change: Helping Faculty Deal With Fear

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How receptive faculty are to changing their pedagogical approach is a complex issue, but one factor that impedes change is the fear of taking a risk. Underlying this fear may be the fear of loss, fear of embarrassment, or fear of failure. Addressing these issues can empower faculty to be more innovative in their teaching. Drawing on research literature, personal teaching narratives, and my own work in faculty development, I discuss some of these underlying fears. I then offer concrete strategies for working with faculty to enable them to overcome these emotional barriers and embrace change.

Introduction

One way to ensure a lively, even heated, debate among college and university faculty is to turn the conversation to the newest pedagogical strategies. Teaching approaches such as collaborative learning and problem-based learning have been extolled by some as ways to develop students' critical thinking and problem-solving abilities and to increase students' engagement in their learning. But these techniques have also been seen by some as trendy, resulting in little more than an increase in the students' "feel good" factor and a decrease in content covered and knowledge retained by students. These concerns may be countered by those who adopt the constructivist's view that knowledge cannot be transferred intact from lecturer to listener but must be actively created in part through interactions with others. Other educators point out challenges in some of these student-centered approaches, however, such as the

danger of misconceptions promoted by group work and the difficulties in transferring content learned in highly contextualized formats such as problem-based learning. Often the difficulty of assessing the effectiveness of various teaching methods punctuates these discussions.

If we start probing in these conversations, we may find that skepticism is expressed not only about those strategies that may be considered most non-traditional, such as problem-based learning, but also for more conventional teaching formats such as class discussions or student-led problem sessions. And, conversely, proponents of highly interactive formats may devalue any form of lecturing. How receptive faculty are to the perceived value of pedagogical strategies is a complex issue that depends less on how compelling the data are in support of these approaches and more on what teachers believe about teaching. Teachers' beliefs is an important topic in educational research, as are studies on how these beliefs may affect practice (Hativa & Goodyear, 2002). These beliefs need not be static but evolve over a teacher's career depending on experiences and the ability of the teacher to reflect on those experiences. Even then, the impetus to change one's teaching practices based on experience and reflection is affected by both intrinsic and extrinsic motivations. For example, an intrinsic motivation may be how much teaching generates a personal sense of satisfaction and an extrinsic motivation may be how teaching is rewarded in our professional career.

Although certain critical impediments to faculty undertaking new pedagogical approaches are institutional and thus extrinsic, those that are most readily addressed are personal. A prerequisite step to the willingness to teach differently is the reflection on practice. Yet reflective teachers may not change the approach they take in the classroom, even though they themselves perceive a need for change based on student feedback, student performance, or their own sense of dissatisfaction with the status quo. As we work with these faculty to improve their teaching, we may face resistance that is hard to decipher. We cannot begin to uncover the range of experiences that faculty have that shape their beliefs about teaching, nor to understand each teacher's psychological, philosophical, and emotional underpinnings for their practice. Yet one factor that has been shown to stand in the way of teachers changing their practice is the fear of taking a risk (McAlpine & Weston, 2002). Addressing this fear can help faculty become more receptive to introducing innovation and flexibility in their teaching. In this chapter I outline some possible reasons for this fear, and I offer suggestions that can help them push past this emotional barrier.

Underlying Fears

Several eloquent personal narratives of teaching exist that highlight a professor's fears and how they have shaped life and career. Elaine Showalter (2003) in her memoir-handbook, *Teaching Literature*, devotes an entire chapter to teaching anxiety and categorizes it into seven types depending on its source: lack of training, feelings of isolation, tension between teaching and research, coverage demands, performance issues, grading challenges, and student and peer evaluation. She highlights fears involved in teaching literature, pointing out that "we believe that what we say in the classroom reveals the deepest aspects of ourselves" (p. 3). This fear of exposure may take many forms and may be more acute in the classroom than in other public arenas because instructors face this audience day after day. Perceptions of mistakes, inadequacies, even character flaws, reenter the classroom daily with one's students, to be compounded by each new infraction.

In his insightful and moving account, *The Courage to Teach*, Parker Palmer (1998) echoes what research and our own experiences tell us:

In unguarded moments with close friends, we who teach will acknowledge a variety of fears: having our work go unappreciated, being inadequately rewarded, discovering one fine morning that we chose the wrong profession, spending our lives on trivia, ending up feeling like frauds. But many of us have another fear that we rarely name: our fear of the judgment of the young. (pp. 47–48)

Palmer notes how these fears can lead eventually to stagnation and cynicism if faculty fail to interpret their experiences accurately or, we might say, fail to reflect productively on those experiences.

Unlike Palmer and Showalter and a few other narrators, to many faculty *fear* is indeed a four-letter word, one not to be spoken in polite society. As faculty talk to us about their teaching, it is up to us to recognize the various fears that underlie apparent resistance, frustration, or complacency. We may then respond more effectively with strategies that allow them to push past their fears and give them new hope to re-reinvigorate their teaching.

1. Fear of loss

In 2002, Daniel Kahneman won the Nobel Prize in Economics for applying insights from psychological research to economic science. Specifically, he and his colleagues studied how human judgment affects decision-making under uncertainty or risk. This work was based on an area of cognitive science that deals with the concept of *cognitive bias*. Cognitive bias arises when we are

faced with complex problems that have no simple solution and our intuitive thinking resorts to heuristics (i.e., general guidelines) to tackle the issue quickly. Unfortunately, in some cases these simple procedures produce erroneous conclusions, especially when our decision depends on a good understanding of the probability of certain events. Kahneman and Tversky (1979) found that people would pass up the possibility of great financial gains in order to avoid a loss—the idea of loss aversion. When making a decision that involves risk, many of us do not base our choices on rational arguments. A person who is loss averse dislikes symmetric 50–50 bets, and the dislike increases with the absolute size of the stakes. This observation relates this work to a behavioral concept dealing with preferences (p. 279).

We humans do not consider gains and losses rationally—our first priority is not to lose. Even though this conclusion was drawn from work with people faced with financial decisions, we may speculate that other apparent high-stakes situations in which we stand to lose something of value might evoke similar responses. Reflecting on this idea, we can see that change of any kind is fraught with possibilities of loss. When applied to changing our teaching, these potential losses can seem to be monumental. What do we fear losing?

We fear losing content “coverage.” This principle is usually cited first and foremost when faculty confront nontraditional pedagogical choices. The tyranny of content coverage is especially acute in certain disciplines that have a recognized body of information on which subsequent courses build, for example, the sciences and engineering. Our illusion is that if we tell students the information that we want them to know, students who are motivated will absorb it, and our obligation to the discipline has been met. Thus, the most readily recognized and accepted pedagogical choice is lecture. It’s hard to argue with this premise head-on because most professors themselves learned very well by the lecture method, and it does have its place as one option in our set of pedagogical tools.

We fear losing control. What do the more student-centered strategies all have in common? They all represent shifts in the nature of authority in the classroom. They require us to move away from the idea that information may be transferred intact from expert to novice. Instead, they ask us to move toward the model of the student as self-teacher, recognizing that knowledge is of necessity constructed in the mind of the learners as they seek to reconcile new knowledge with mental models they’ve built based on former experience.

Research in cognitive science may currently be interpreted as validating the view that knowledge is constructed, not simply absorbed, yet for many of us this theory is not necessarily readily accepted. We need to believe that we can control the development of students’ ideas through our eloquent prose and detailed explanations; otherwise, it’s hard to know our role in the class-

room. Interestingly, research in cognitive science also shows us how important the fear of loss of control is to human thinking (LeDoux, 1996). Our students may struggle against learning in our disciplines because they perceive that we are imposing our control over them (Zull, 2002). How much more then may we as instructors resist handing over our hard-earned position of authority to students? And we may even perceive those who encourage the use of alternate pedagogies to be someone else seeking to tell us what to do.

Proposing that we change our preferred way of teaching seems to assault us on two levels. First, the classroom has usually been an arena in which faculty work in isolation and in absolute control. We do not typically engage in collegial discussion about teaching, so raising questions about our choice of techniques may seem to be an unexpected and inhospitable attack on our professional expertise. Add to this the fact that the pedagogical methods being touted often ask the teacher to relinquish authority in the classroom to novices, and we have added insult to injury.

i. Fear of Embarrassment

Necessary for academic success is the ability to pose intellectual questions and to generate recognizably valid arguments to answer them. In general, most of us didn't need to be highly adept in social situations to get where we are in academia. Yet many of the teaching modes other than lecture require us to navigate and direct human interactions, a somewhat daunting task. When working with students in groups or even facilitating a meaningful discussion, we are in danger not only of losing content coverage and control, but also of embarrassing ourselves—we fear being seen as incompetent, less smart, perhaps even just silly. As Palmer (1998) said, we fear students' judgment of us. We fear losing respect. Most of us have spent a great deal of time honing our lecture skills in order to avoid being embarrassed in public. Asking us to step into another area of perceived performance for which we have limited training is asking a lot.

ii. Fear of Failure

Finally, and not least importantly, we fear failure—failure to transmit critical concepts in our discipline, failure to resonate with students, failure to be perceived as experts in our field. Whatever mode of teaching we have been using represents the known. Any failures we noted in the past using these strategies have been rationalized and dealt with. To change means to bring the effects of our teaching under close scrutiny again. We may need to find different explanations for student failures and put our own performance under review and judgment again.

: How Prevalent Are These Fears?

A number of anecdotal accounts document a teacher's fears, but what does the research literature say about this phenomenon? Several studies exist on math anxiety, test anxiety, even computer anxiety, but very little on teaching anxiety—unless we lump it under the very broad category of performance or speech anxiety. Two studies dealing specifically with teaching anxiety, one among psychology professors (Gardner & Leak, 1994) and one among accounting professors (Ameen, Guffey, & Jackson, 2002), found that a large majority of faculty (78%–87%) had experienced some form of teaching anxiety, broadly defined as “distress that comes from either the anticipation of teaching, the preparation for teaching, or the experiences that occur while teaching” (Gardner & Leak, 1994, p. 29). In the majority of cases this anxiety was described by faculty as arising from external events, not existing as a part of the professor's self-described personality, and presenting an ongoing challenge.

In these studies, teaching anxiety was associated with some activities that involve talking to any group, such as standing before the class before speaking, but other triggers were not so related: class preparation, students' questions, negative feedback or disruptions from students during class, and end-of-term evaluations. As one might expect, in both studies anxiety felt while teaching diminished in a statistically significant way in teachers with more experience and higher rank. The amount of teaching experience, however, did not correlate with reducing the other potential triggers of anxiety; that is, student questions and evaluations or class preparation activities, at least in the study of psychology professors (Gardner & Leak, 1994). Instructors did not significantly associate anxiety with a class format, such as discussion versus lecture, but more with lack of familiarity with course material as noted in the study of accounting professors (Ameen, Guffey, & Jackson, 2002).

Neither of these studies asked specific questions about anxiety when using alternate teaching strategies such as group work, but certainly we could speculate that the unfamiliarity with this style of teaching and the perceived loss of control could act as an anxiety trigger, perhaps in a similar way as does lack of familiarity with course material. The student-centered formats are more likely to expose professors to possible negative responses from students, an identified trigger in both studies. Both class preparation activities and student evaluations were noted sources of anxiety in these studies, and one can imagine that changing one's teaching to include flexibility in class format and more student interaction could elicit these fears as well.

Addressing These Fears and Encouraging Change

Keeping these fears in mind as we consult with faculty about their teaching, we may find it helpful to draw on a model of how beliefs about teaching change with experience and reflection. Douglas Robertson (1999) presents a three-stage developmental model of professors' perspectives on teaching. In his model, what teachers perceive as shaping the teaching and learning process moves through the following progression:

- The teacher controlling the dynamic
- The learner and his or her needs directing the dynamic
- The interconnectedness of teacher and learner as integral to the dynamic

Each of these stages encompasses and expands upon the previous, and the transition between each view may be fraught with some discomfort, anxiety, and feelings of loss. Each transition requires instructors to renegotiate the idea of control in the classroom, to recreate the vision of what the classroom dynamic entails, and to reevaluate the ultimate goals of teaching. Robertson's work shows that instructors deal with the discomfort of these transitions either by reverting back to comfortable though unsatisfying prior practices or by changing direction.

When faculty have reached a stage in their experience and reflection in which they feel a need to try something new in their teaching, we need to support them in taking what they probably perceive as a risk. We need to decrease their sense of perceived losses and recognize that their anxiety might be particularly acute when thinking about class preparation, class dynamic, and student response to the strategy. What approaches we suggest for them have to fit within their comfort zone based on disciplinary traditions, past practices, and overall teaching experience. In this regard we may find useful ideas in the classic work of Everett Rogers (1962), *Diffusion of Innovations*. To be appealing, an innovation must:

- Confer a relative advantage
- Be compatible with existing values, past experiences, and needs of potential adopters
- Be relatively simple to implement
- Be doable as a trial sample
- Have positive results that are observable

These ideas offer us ways to help faculty allay their fears. For example, fear of loss may be offset by emphasizing the relative advantage of a pedagogical innovation. Does an instructor's current mode of teaching best help reach his or her goals based on what we know about student learning? Or would another pedagogical approach actually confer an advantage for the class? Is the strategy simple to try in a limited way that does not detract too much from traditional content coverage? May this strategy be planned in such a way that the risk of embarrassment and failure is minimized?

If faculty attempt such a trial, then it is imperative that the strategy be one that has a good chance of producing a quick, modest success, again in terms of some instructional goal. That success is crucial to building an instructor's confidence and spurring additional ventures, perhaps even those that seem to be riskier. In helping faculty think through these strategies, however, we must keep in mind the values and experiences of the instructor as well as his or her pedagogical or curricular needs. Strategies that seem appropriate in the format of a history class may seem alien and off-putting to a chemistry instructor. The incorporation of this strategy in a professor's course planning should seem natural and not too intrusive, so that preparation is not too anxiety-producing. And the strategy should not require the instructor to navigate a radical shift in class dynamic. Likewise, the strategy should not dramatically deviate from what students' might expect, so that student response could be expected to be at least neutral to this change.

These ideas are best illustrated by posing some hypothetical examples of our work with faculty. Let's first examine the case of Professor Williams, an instructor of a large lecture class. She is a fairly new instructor who attends a book group session in your teaching and learning center. After one session she makes a casual comment that she'd really like to have more class interaction but she is concerned that introducing discussions or group work will mean loss of content coverage and control of the class dynamic. She also says that she feels awkward moderating such activities. Taking this opportunity, you suggest a simple, no-risk strategy such as a "one-minute paper" (Angelo & Cross, 1993). In this classroom assessment technique, instructors ask students at the end of the class to write down a key point they remember from the session or a question they still have. Between that class and the next the instructor peruses these comments, and then takes a small amount of time in the following class to address students' concerns or misconceptions. Very little time is required either during the class lecture time or by the professor afterwards, yet this simple technique can quickly provide Professor Williams with a great deal of information about her students' progress and help her students feel that she is indeed interested in their learning. This strategy can be a successful first ven-

ture into adding more communication between her and her students in the class. As we think again of Robertson's faculty development model, the one-minute paper begins to build a bridge from the teacher-centered approach to a more student-sensitive mode of class dynamic.

You follow up with Professor Williams a week or so later, asking how she found the use of the one-minute paper and offering further resources. She mentions that students have begun using the course management software to send her these comments. From the tenor of your conversation, you discern that she found this strategy very helpful and is open to further ideas. Because Professor Williams has access to and is apparently comfortable with technology, a number of low-risk options are available for increasing student interaction. Perhaps the technological intervention that poses the least risk is the use of course management systems to facilitate student online discussions, either with or without the instructor's participation. She can pose questions to the class to help prepare students for class lecture or direct their reading more productively, or students can be asked to generate questions based on readings or lectures.

Professor Williams indicates that she has been using the course management software in this way, and she would really like to bring something like this into the classroom. An interesting and potentially powerful use of technology to increase student interaction during class is the use of personal response systems. These devices can be fairly inexpensive and allow faculty to pose questions and poll student response in real time. In this case, Professor Williams poses a question with numbered possible answers, and students click on the number of their response which is recorded electronically using the same kind of technology as a television remote control. A graphical summary of responses can be generated via computer connection and projected to the class or to Professor Williams alone. This process encourages student involvement while maintaining student anonymity. Again, the cost in terms of content coverage is small, Professor Williams maintains control of the class dynamic in the broadest sense, and the risk of embarrassment to her is minimized. And this technique provides her with immediate feedback on her students' understanding of key concepts. She should also perceive positive effects from this in terms of an increased energy level in the class and improved student interest.

This particular strategy has an advantage in that instructors who become satisfied with its use in more simple applications may be willing to use it to experiment with peer learning techniques. For example, Professor Williams can pose a conceptually complex question, have students post responses, and review the class summary. But before disclosing the best answer, she can ask students to pair up and discuss the questions with a classmate for a specified amount of time and then reenter a response. Professor Williams may then

provide needed commentary or facilitate student discussion. This technique is a powerful way to promote conceptual change, and Professor Williams can see the immediate effect of student interaction on student learning.

The sequencing involved in the progression of suggestions made to Professor Williams is an important element in the process. Without Professor Williams having had a positive experience with other less intrusive class exercises, the use of peer learning activities in class might appear too risky. What if students don't talk? Preparing the perfect question and eliciting student answers might be anxiety-producing in this case. What if students perceive her as making busy work for them, or worse still, as shirking her responsibility? In this case, the students' potentially negative response is an anxiety trigger and a probable deterrent to her willingness to try this approach. Technology can provide a crutch in the sense that it allows the professor to transfer some of the weight of responsibility in capturing student interest and stimulating student interaction to the equipment. It provides a way to communicate and connect in a meaningful way that still allows a comfortable distance between instructor and student, or between implementation of pedagogical strategy and student response.

A second case is posed in Professor Adler, a senior professor who is teaching a small seminar class. You meet Professor Adler when he asks for a consultation because his teaching evaluations are not what he (and his department) expect. He tells you that he has been teaching the same course for years. He used to lecture to the 12 or so students, and he often spent hours in preparation. He says that the students didn't appreciate his efforts, and he thinks that lectures are a "bad" pedagogical choice. He thinks that the students should be doing the work, and he now asks students to do all the class presentations and he uses videos to supplement. He says that his low evaluations are a consequence of student passivity.

One interpretation of Professor Adler's choices is that he has willingly embraced the more student-centered pedagogies but lacks the skill to help students navigate this dynamic effectively. And this idea may explain part of the issue. But during this conversation you sense that Professor Adler was discouraged by student reaction to his lecture performance and has tried to relieve this stress by transferring responsibility for the class dynamic to students. His pedagogical choice may have been driven by fear rather than by understanding his goals for student learning and developing strategies to help students reach them. He has traversed Robertson's first stage of teacher development, but was impelled to do so by a desire to avoid student judgment.

Professor Adler's is a complex case that is too often seen on campuses. The challenges for us as consultants are to help him find a way to reengage with his class that relieves some of his apprehension and invigorates him, yet

at the same time minimizes the chance for negative student response or other anxiety triggers. In order for Professor Adler to see an advantage to any change you suggest, he needs to be clearer on his goals for the class. He may have leaped to an alternate pedagogical strategy out of fear and without adequate reflection. Thus, your first task is to help him reflect more productively. And, in general, he may find that students respond more positively if he shares with them his goals for their learning, how these goals inform his teaching choices, and what he expects from them. As he outlines those with you, he may become clearer himself on what he really hopes to accomplish in the class. What does he perceive as students' responsibilities? How may he as professor help students successfully assume those responsibilities?

Once he is clearer on his goals for the class, we need to offer suggestions of approaches that provide an advantage, are not too far from his experience and comfort level, and are doable on a small scale with good chance of success. We also need to remember that he may feel more anxious when preparing for a new pedagogical approach and when thinking about dealing with student response to it. If one of his goals is to have students become more independent learners, as suggested by the approach he has taken, you may initially suggest that he provide some guidance for students on their presentations based on his expectations and the learning goals for the exercise. He might talk a bit with them about the structure of the presentations and provide a sheet that outlines the key expectations, thus illustrating for them his own thinking process. Afterwards he could provide written feedback to the student presenter noting strengths of the presentation and suggestions for improving the next one. He might consider having the first presentation by a student be evaluated formatively, not for a grade, or for a lesser percentage of the grade than later attempts. This approach allows students to take risks without the threat of dire consequences. Professor Adler may also benefit from using one-minute papers to solicit students' concerns and questions about the presentations before unspoken ill feelings begin to erode the class dynamic. These interventions should cause him little concern during his preparation for class, and the increased communication in the class can help ease his anxiety about student response to his teaching.

At a follow-up meeting Professor Adler tells you that he has implemented these ideas, and he notes that the students seem more receptive to the class format. You discern that he may be relaxing a bit more with the class as well. You then propose to him what may seem a riskier strategy—that of adding some group presentations/projects to the class. Because he wants students to become more independent learners, having students work together in groups may seem counterintuitive. What advantages does this strategy offer him? It

allows him to challenge students beyond their own individual limitations while providing them with some support for that challenge, and studies suggest that this strategy promotes students' critical thinking skills and increases their engagement and satisfaction with the class (Johnson, Johnson, & Smith, 1991; Springer, Stanne, & Donovan, 1999). Group work may raise his concerns about ensuring individual accountability and monitoring group process, as well as anxiety about student response and fears about losing control of the classroom dynamic. Giving him ideas on how to structure the group process and evaluate student group work can ease his discomfort in preparing for this unfamiliar strategy. There is the risk that students will be ill at ease with group work as well, so providing structure, such as assigning roles in the group, may help everyone's comfort level. Allowing students some choice of topic, role in the group, and style of presentations may motivate them and ease their apprehension. He may want to talk with the class about the benefits of this format and solicit their concerns. Helping Professor Adler and his students think about teaching and learning as process and not performance should lessen the fear in the classroom environment. And along the way, Professor Adler may recognize the interconnectedness of the teacher and learner in the classroom dynamic, the final stage in Robertson's development model.

You encounter Professor Adler on campus near the beginning of the next term, and he tells you that his evaluations for the seminar course improved and he felt more positive about the class than he had in some time. When you query him about his use of groups, he sheepishly admits that he never tried using them. You can tell that his concerns about navigating group dynamics and generating negative student reactions were too great. But he points out that he enjoyed his conversations with his students and that he might consider the use of groups next time. His example illustrates that even with our best efforts, faculty fears will sometimes win out. But we also see that succeeding with small steps can reenergize faculty and pave the way for future attempts with new, riskier strategies.

Conclusions

In *A Life in School*, Jane Tompkins (1996) recounts her re-envisioning of her teaching after years of soul-searching in various aspects of her life:

Whereas for my entire teaching life I had always thought that what I was doing was helping my students to understand the material we were studying . . . that moment I realized that what I had actually been concerned with was showing the students how smart I was,

how knowledgeable I was, and how well-prepared I was for class. I had been putting on a performance whose true goal was not to help the students learn, as I had thought, but to perform before them in such a way that they would have a good opinion of me. I realized that my fear of being found wanting, of being shown up as a fraud, must have transmitted itself to [my students]. Insofar as I was afraid of being exposed, they too would be afraid. (p. 119)

This cycle in which our fears feed those of our students is also recounted by Palmer (1998). The more we fear student disapproval, for example, the more we may tend to act in ways that evoke student negativity. We may distance ourselves from students, thus cutting ourselves off from the type of communication that undergirds all successful teaching. Bernstein (1983) speculated that anxiety associated with teaching could lead to teaching behaviors that were detrimental to the class, such as avoiding answering students' questions or relying too much on student presentations or videos. Thus, helping faculty overcome these fears that stand in the way of productive reflection and openness to change can lead to a more positive class experience, regardless of the pedagogical strategies that the professor chooses to use.

In all our work with faculty, being aware of the implicit fears that may underlie an instructor's interest or disinterest in certain pedagogical approaches can inform our work in powerful ways. This awareness can help us realize what is apparently at stake when faculty respond emotionally to suggestions for pedagogical change, can help us form an understanding connection and find common ground with them, and can ultimately help us suggest strategies that resonate with the faculty member's experience while avoiding specific anxiety-producing triggers.

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