



Addressing Student Diversity in the Classroom:  
The Approaches of Outstanding University Professors

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## Abstract

Individual interviews were conducted with 18 faculty members at the University of Connecticut who are designated as University Teaching Fellows. This recognition is one of the highest honors conferred upon faculty at the University. Teaching Fellows were asked to describe what they enjoyed most about teaching, what type of professional development techniques are used to improve teaching, what motivates them to improve their instruction, and to discuss changes in the student population, particularly with respect to students with learning disabilities. Additionally, Teaching Fellows described effective teaching strategies employed in their classroom instruction.

## Addressing Student Diversity in the Classroom: The Approaches of Outstanding University Professors

### Issue

As increasing numbers of students with diverse learning needs access postsecondary education programs, there is a need to design inclusive instructional methods that ensure equal academic access. In order to better identify such methods, it is important to determine the challenges and barriers to equal access to instruction as perceived by key stakeholders, namely students and faculty. College faculty who are recognized for excellence in teaching can provide insight into innovative instructional strategies that can enhance instructional access. Furthermore, a deeper understanding of incentives and supports for improving instructional techniques can be elicited from these outstanding professors.

### Research Questions

- What are the perceptions of a group of distinguished university faculty in relation to increased student diversity in their classes, and, in particular, to increased numbers of students with disabilities?
- What instructional strategies or techniques are employed by this group of distinguished professors?

- What are the perceptions of distinguished university faculty related to professional development (e.g., motivation and incentives to improve, faculty development methods, personal satisfaction)?

### Method

As an activity related to overall project goals of the Universal Design for Instruction (UDI) Demonstration Project at the University of Connecticut, Individual interviews were conducted with 18 faculty members at the University who are designated as University Teaching Fellows. This recognition is one of the highest honors conferred upon faculty at the University and is an acknowledgment of exceptional college teaching based on student and colleague nomination and input. Each interview was conducted in person by one of two graduate assistants working on the UDI project. The graduate assistants were provided with an interview protocol, and in keeping with an open-ended interview process, deviated only slightly from the questions to explore a particularly relevant or interesting direction of conversation. The interview protocol is included in Appendix A. Interviews were recorded (with permission), transcribed, and subsequently examined for specific themes. Participants consisted of 11 males and 7 females, representing a broad range of academic disciplines including engineering, biology, art history, physics, mathematics, accounting, plant science, education, psychology, and family studies.

## Executive Summary

### Attitudes toward Teaching

All Teaching Fellows described a positive attitude toward teaching at the university level. Faculty members reported enjoying the opportunity to help students and observe them achieve an understanding of course content. The variety of experiences that teaching offers, the challenge of trying to support the growth and educational attainment of individuals, and the interaction with students were each mentioned as contributing to the positive aspects of teaching.

### Changes in the Student Population

When asked about diversity in the student population, only one faculty member specifically commented on students with learning disabilities. Other Teaching Fellows described changes they have observed over their years of teaching in gender, race and ethnicity, and the skill level of students.

### Students with Learning Disabilities in Classes

When specifically queried about the presence of students with learning disabilities on campus, most faculty acknowledged having one or several in their classes. In describing any challenges faced by students with LD, most faculty referred to students' problems taking exams, and spoke of providing accommodations. Other faculty members explained the challenges faced by students in more detail, and described a willingness to provide extra assistance to students, especially if a student disclosed early in the semester and was willing to put forth good effort ("I'm very accommodating to these students that I

see have really wanted to make an effort to be successful.”). By and large, the most frequently described method for assisting students with LD occurred during office hours in a tutorial vein. Some Fellows reported having established weekly meetings with students with LD who needed assistance on a regular basis. Still others were vague (“I think that I have had some” students with LD in my classes...) when asked to describe specific experiences with students with LD.

### Faculty Development

The majority of Teaching Fellows reported no active involvement in formal faculty development strategies, such as using the literature on effective instructional techniques and/or attending conferences or workshops on college teaching. Two of the faculty reported that their departments were proactive in terms of bringing in speakers to discuss new directions in their field and training on related topics and teaching styles (e.g., media use in the classroom). One Teaching Fellow reported attending workshops and conferences related to teaching pedagogy.

### Detailed Findings

An overview of responses to each interview question follows. Illustrative comments and responses from participants are included for each question.

### Increased Student Diversity

When asked about changes in the student population, specifically with respect to diversity, most Teaching Fellows commented on changes in gender, ethnicity, and the variety of nationalities represented in their class rosters. All but one had to be prompted to discuss students with disabilities in relation to

diversity. When prompted, several described experiences with students with LD in their classes. Most focused their comments on the testing accommodation needs of students with LD, commonly providing extra time or a separate testing location. One noted that “I really believe strongly in creating circumstances to deal with different students’ exam needs in as fair a way as possible.” Several stated that the presence of students with LD does not impact how they deliver instruction. As one professor said, “I don’t think I’ve changed my instruction so much as tried to be especially mindful that they have some additional requirements which I try and meet outside of the classroom more than inside of the classroom.” Setting up individual meetings with students was often described as an effective way to assist students with LD.

However, three faculty members specifically stated that working with students with disabilities caused them to examine the way in which their instruction is delivered. One noted that when he becomes aware of a particular student’s learning needs, he tries to individualize a strategy or accommodation for that student, without other students being aware. Another professor reflected that her work with students with hearing impairments helped her to understand that she speaks very quickly and that some changes were necessary to her pedagogy to better meet the needs of these students. A third Fellow described that she reconsidered and changed some of her teaching approaches because of her experience working with students with LD. She now presents a variety of instructional activities within a class meeting and uses authentic assessments in

which students can use multiple methods to demonstrate their knowledge of course material.

### Effective Teaching Strategies

Each Teaching Fellow spoke at length about effective instructional strategies used in the classroom. Although the types of strategies were wide ranging, they grouped into several broad categories, including: (a) setting clear expectations and demands; (b) being approachable and available to students; (c) actively engaging students; and (d) setting high expectations. Each strategy is described in detail.

Clarity. Nearly every one of the Teaching Fellows spoke strongly to the importance of being very clear and explicit about course requirements and expectations. Several explained that they distribute very detailed course syllabi containing course policies and information about assignments, labs, and exam dates. It was also clear that these key policies and dates are referred to often, so, as one professor stated, “they’re never caught off guard.” Another professor described his distribution of a daily class newsletter that contains “a thought of the day, it has guidance about where you should be in the course, what chapter you should be reading, what you should be focusing on.”

While the Fellows spoke to the importance of being clear and organized, they also described the benefit of this effort, namely, that it provides an avenue for making a course demanding and rigorous while remaining fair. One professor summarized this succinctly, stating, “I just want to make the classes very demanding. But I feel a tremendous obligation to be very clear-cut about my

expectations. If you are going to make them that demanding then I just don't think it is an exercise in responsible teaching if I don't clearly state where we are going."

Several faculty commented that several years of teaching provided them with the perspective that focusing in depth on the truly important concepts of a topic was more important than covering a broad range of topics more superficially. One professor explained that he approaches each lecture with the following lens: "Think carefully each lecture about the three things you want them to walk away with. And focus on these three things. Your chapter may cover 25 topics, but identify the three or four that your students need. And make sure they understand them." He concluded that "we tend to make a mistake that we confuse being comprehensive with being thorough." Likewise, another professor stated that "I won't try to cover as much of the syllabus as I possibly can but only have 40% of it retained. I'd rather miss some of the syllabus and make sure that everything we are building on throughout the course... as much of it is learned as possible." One professor discussed how creating a course manual forced him to establish the critical information to teach, "because you can't have a manual that is 500 pages or 500 slides. I really had to make some decisions about exactly what my learning goals were and in what order I was going to teach those things."

Several of the Fellows spoke to the advantage of providing students with course notes. The reason was nearly universal across the group: the professors wanted students actively listening and learning, rather than mechanically taking

notes. One professor said, “I don’t like them trying to take too many notes because you’re not listening and...you miss too many things.” Another stated that he provides notes so that “students come to class and not compulsively just take notes...I want people actively learning and thinking.” Likewise, a third explained “I found early on in teaching that I was in competition with students trying to write things down, so I took away that barrier.”

Approachability. The idea of being available to students was strongly articulated by several of the faculty. Many described deriving enjoyment from having an “open door policy” with students to talk about a course or to just talk. As one professor said, “I like them to come by anytime. I like them to come. I don’t care if they have a question.”

Being approachable and available also extended into the classroom. One professor explained that he arrives at his classroom early to get organized for the day. He then greets the students at the door as they arrive. Another professor mentioned that early in his teaching career he would arrive at the classroom just before the scheduled start time, deliver his lecture, and then leave. He began to observe the style of an older faculty member in his department who was quite popular with his students, and noticed that this professor arrived early, greeted his students upon arrival, and remained after class to speak to students, either in the classroom or in the hallway. The younger faculty member began to emulate this style, and he found that he was more “approachable” in the eyes of his students. The importance of being approachable goes beyond being popular with students, for as this faculty member said, “if you’re not approachable, students

won't come and ask for help if they're having problems. If you're not approachable, they just won't ask questions in class. If you're not approachable, very often they'll tune you out."

A professor in Statistics also addressed the value of being approachable in order to allow students to feel comfortable seeking help. She recognized that some students come into her courses with "horror stories" related to math and statistics, and she encourages students to come meet with her personally. In this one-to-one setting, she tries to help the student to relax, and actively engage in problem solving.

Engaging students. Many of the faculty discussed methods used to engage their students and to make abstract course material more understandable. A professor of Biology discussed the comprehensive use of technology to keep his lectures interactive. As he said, "I hear and I forget, I see and I remember, I do and I understand." As an example of this adage, he builds molecular structures on a computer display based upon student responses to his questions. This takes an otherwise passive lecture environment and makes it into an active and shared learning experience. A Physics professor explained that in his lesson on particle physics he discusses PET scans, as many of the students know a person who has had one. As this Teaching Fellow said, "you can make the topics in physics a little bit more engaging to the students because you can relate it to their personal lives in some way." Through such strategies, this professor has found he is able to take some difficult abstract concepts and put

them “in a way that a student with not a lot of experience at the time could really sink their teeth into and grab onto it.”

High expectations. Challenging students and holding high expectations were clearly important to this group of distinguished faculty. One professor in the sciences stated that a professor must hold an internal compass, “which involves things like professional standards and accomplishments and the fact that you know that your nursing majors need to understand pressure and flow velocity.” Another stated that “the most important thing for a teacher to do is to come into a classroom and say ‘we have so much time together today. I’m going to use your time enormously well...and we’re going to learn a lot in a short amount of time. The most important thing...is to begin to concentrate, really be with me.” Several faculty also spoke of being able to influence or even change the lives of their students by creating a challenging but fair experience in their courses.

#### Professional Development and Incentives to Improve

Each Teaching Fellow was asked if she or he participate in any type of faculty development programs or activities. Two said yes. One attended a seminar within the University, and another attended a conference that offered workshops on teaching techniques. Two other Teaching Fellows explained that they talk to their colleagues and share ideas, and two attributed their excellence in teaching to mentors when they were graduate students. One professor summarized a common thought among this group when he said, “Apart from the experience that I had as a teaching assistant we were never really trained as teachers. So when it comes to research, we’re professionals. When it comes to

being teachers, we're amateurs. We are really just self-taught, we pick it up in sort of a random fashion."

Although the Teaching Fellows largely did not report the use of formal faculty development programs, there was clearly a high level of internal motivation to continually improve instruction. Students appeared to be the fuel for this motivation. This was eloquently explained by a professor who said, "what sustains me, when I leave, when I'm gone, what am I going to leave behind me? And what I'm going to leave behind me is what I've left with the students in my classes."

Several professors specifically described how they strive to improve for their students. One professor prepares for each course with the underlying question, "What am I going to do that is new this year? What am I going to experiment with this year, how am I going to change the course to better meet the population I'm serving?" One professor acknowledged that he learns from his students, noting, "I've always felt that the students were my teachers too. That they can give me something back. To try to help me do better." Likewise, another professor said, "Basically I get satisfaction out of doing a good job and I'm always trying to improve...I always listen to feedback from the students as far as what they think I could do to improve my courses, and I always pay attention to the written feedback."

### Summary

Although there was great diversity in the academic fields from which these 18 Teaching Fellows were drawn, several common themes emerged. First, the

majority of the group specifically described deriving satisfaction from working with students, promoting learning, and making a difference in the lives of others.

Second, each professor reported that he or she employs a comprehensive set of instructional tools and strategies. Common across these strategies were organization, focus, and holding high expectations for students. These expectations supported a desire to be fair to and caring of students. As one Teaching Fellow stated, “The most important part of teaching is caring. Caring that your students do well, caring that your students have a clear opportunity and a really clear understanding of what and how and why things happen. Caring about them as individuals, caring about them personally.” Third, each Teaching Fellow reported striving to improve as a teacher. Several specifically identified that students were both their primary source of motivation and their primary point of feedback for improvement. As one faculty member explained, “When you aspire to teach you aspire to the realization that the job is never done. That the journey, if you work at it and you give others a chance to tell you how you can do a better job, I think is the most precious and the most beautiful thing that we can give to one another.”

Appendix A  
Teaching Fellow Interview Protocol

## Teaching Fellow Interview Protocol

### Icebreakers: Pick and Chose as Needed

1. Tell me a bit about your background in teaching.
  - How long have you been teaching?
  - What have been your teaching responsibilities in the last 5 years or so?
  - What do you enjoy most about teaching?
  
2. What are some of your most effective teaching strategies? (for example, ways you approach instruction, strategies for getting group involvement, help in understanding a complex concept, methods for assessing student learning, etc.)
  - Can you describe some of your favorite approaches or do you have any samples we can have?

### Diversity

3. One of the recent changes in college instruction that our project is focusing on is the increasing diversity in the student population and the impact that has on teaching. In your years at the University, have you seen more diverse students in your classes?
  - (if they ask about “diverse” = disabilities, age, ethnicity, English as a second language, ability level,)
  - What kinds of diversity have been represented?
  
4. Have you had students with LD in your classes?
  
5. Has this influenced how you approach instruction?
  - Created any issues in your classes? (for example?...)
  - Caused you to alter or expand your approach to teaching? (how....)
  - Changed how you assess student learning? (how...)
  
6. How have you responded as an instructor?
  
7. Are there instructional strategies that you use that help reach these diverse students (and maybe all students)?

### Professional Development

8. The literature suggests that faculty development enhances teaching. Have you been involved in effective faculty development?

- if so, what types?
9. What motivates you to improve your teaching?
  10. What are the biggest challenges you face in trying to improve your teaching?
  11. You've been acknowledged as an outstanding teacher. What advice would you give new faculty wanting to teach all students better?

