The Impact of a Faculty Training Program on Teaching Conceptions and Strategies

Adalet Baris Gunersel and Mary Etienne Temple University

This article presents a preliminary study of a faculty development program at a university in the Northeastern United States, exploring how the program influenced instructors' teaching conceptions about teaching in general and themselves as educators, and teaching approaches, including intended and adopted strategies. Interviews with 12 participants were conducted and analyzed; the theoretical orientation for the analysis was the grounded theory approach, and the constant comparative method of analysis was used. Findings indicate that the program influenced all of the participants' teaching conceptions in various ways (seven themes) and facilitated a shift towards a student-centered approach to teaching. Additionally, the program influenced all of the participants' teaching approaches (16 intended or adopted strategies), leading to the use of active learning methods. This study adds to the literature on the impact of pedagogical training programs for faculty, which is crucial as there is an increase in faculty development centers.

In 1997, Pratt observed that, despite attempts to highlight the value of teaching by several scholars in the 1990s (e.g., Boyer, 1990; Rice, 1992), teaching continued to be actively devalued in higher education, especially in comparison to research. Indeed, over the last decades, there has been a growing imbalance between rewards for teaching and for research with the latter being emphasized (Fairweather, 2005; Huber, 2004). While research-intensive universities in the United States may express the importance of highquality teaching, they mainly focus on research when it comes to promotion and tenure (Leslie, 2002; Wright, 2005). Faculty members are not required to receive pedagogical training in the United States (Tanner & Allen, 2006) or in several European countries (Postareff, Lindblom-Ylänne, & Nevgi, 2007) and thus are not prepared to teach effectively. Research suggests that increased teaching experience does not necessarily improve instructors' teaching approaches or teachingrelated perceptions (e.g., Norton, Richardson, Hartley, Newstead, & Mayes, 2005; Richardson, 2005), which further implies the importance of opportunities for instructors to develop teaching skills. In recent years in the United States, such opportunities have become more accessible due to an increasing number of faculty across development centers higher education institutions (Light, Calkins, Luna, & Drane, 2009). Faculty pedagogical training has been increasing throughout Europe as well: it is well established at some universities in England and Norway (Gibbs & Coffey, 2004), and it is mandatory at some universities in Sweden (Sonesson & Lindberg Sand, 2006) and the Netherlands (van Keulen, 2006).

With the increase in faculty development centers, there has also been increasing research on these centers and the pedagogical training programs they offer (e.g., Eggins & MacDonald, 2003; Postareff et al., 2007). The impact of the centers and their programs needs to be explored continuously and effective program models need to be shared across institutions (Light et al., 2009).

This article presents an evaluation of an intensive pedagogical training program and its effects on participating faculty members at a large urban university in the Northeastern United States. It is the preliminary study of a longitudinal research project where yearly iterations of the program are explored.¹ Similar to an increasing number of studies which focus on how programs might impact faculty teaching approaches (Ho, Watkins, & Kelly, 2001; Trigwell, 2003), this study explored the ways in which the training program influenced faculty's teaching conceptions, including opinions and attitudes related to teaching in general and themselves as educators, and faculty's teaching approaches, including intended and adopted teaching strategies. One-on-one interviews with 12 instructors who participated in the program were conducted and analyzed. Findings suggest that the program influenced faculty members' teaching conceptions and teaching approaches in various ways. Moreover, instructors not only intended to adopt teaching strategies that they learned during the program but also started actively incorporating these strategies into their own teaching.

Teaching Conceptions and Teaching Approaches

Various studies have examined educators' teaching conceptions and teaching approaches (Kember, 1997; Samuelowicz & Bain, 1992, 2001; van Driel. Verloop, van Werven, & Dekkers, 1997; Wood, 2000). Teaching

¹ In the present study, we reanalyzed data from another investigation, which was published in 2013 (Gunersel, Barnett, & Etienne, 2013). While the previous study analyzed the data through the theoretical lens of self-authorship, in the current study, we used a purely emergent design to evaluate the training program and address different research questions.

conceptions have been defined as the way in which educators conceive of, or understand, teaching and learning, while teaching approaches have been defined as educators' actual teaching strategies and intentions (Prosser & Trigwell, 1999b). Research has revealed that conceptions and approaches can range between two broad orientations: a teacher-centered orientation and a student-centered orientation (Åkerlind, 2003; Trigwell & Prosser, 2004). According to a teacher-centered orientation, teachers possess knowledge that they transmit or impart to students, and the focus is on the subject, the content, and the teacher's actions (Samuelowicz & Bain, 1992). Meanwhile, according to a student-centered orientation, teachers take into account students' existing conceptions and facilitate student learning and conceptual change by engaging students with interactive classroom activities and authentic assessment activities (Prosser & Trigwell, 1999b).

Research suggests that educators' teaching conceptions influence their teaching approaches (Donche & Van Petegem, 2011; Kember & Kwan, 2000; Prosser & Trigwell, 1999a). Teachers whose teaching conceptions lean towards a teacher-centered orientation tend to use teacher-centered teaching strategies, such as extensive lecturing, whereas those who have more student-centered teaching conceptions tend to use more student-centered teaching strategies (Kember & Kwan; 2000; Eley, 2006) which engage students, requiring them to do meaningful learning activities and to reflect on the activities (Bonwell & Eison, 1991), which in turn leads to enhanced learning (Benek-Rivera & Matthews, 2004; Blanchard et al., 2010; Derting & Ebert-May, 2010; Sarason & Banbury, 2004; Watkins, 2005).

There is also a relationship between instructor approaches to teaching and student approaches to learning (Kember & Gow, 1994; Prosser & Trigwell, 1999b), which influence the quality of student learning outcomes (Trigwell & Prosser, 1991). Students' approaches to learning have been categorized as either "deep" or "surface" according to the adopted strategies of studying and intentions behind those strategies (Prosser & Millar, 1989). Students with a deep approach to learning intend to understand the main ideas and find meaning within the concepts, and they adopt strategies such as "relating and distinguishing evidence and argument, looking for patterns and underlying principle" (Prosser, & Trigwell, 1999a, p. 40). Thus, teachers with a student-centered orientation tend to use student-centered teaching strategies, all of which correlate more strongly with students' deeper approach to learning, leading to enhanced learning outcomes.

Some researchers suggest that instructors' teaching conceptions need to shift towards a more studentcentered orientation before improvement of actual teaching can take place (Henderson, Beach, & Finkelstein, 2011; Ho et al., 2001; Oosterheert & Vermunt, 2003). This suggests that pedagogical training programs should target teaching conceptions as well as learned teaching strategies. In turn, if we are to determine the effects of a pedagogical program, it is important to explore the influence the program had on instructors' perceptions as well as strategies adopted (Kember, 1997).

The Faculty Training Program

The faculty training program that is the focus of this study is part of a graduate student certificate program on teaching in higher education at a large urban university in the Northeastern United States. Faculty members who teach the core course of the certificate program are nominated by the dean's office at their school or college, receive a small stipend and participate in the training program to prepare to teach the course.

The training program consists of 12 three-hour sessions over the course of 5-6 weeks during the summer and is facilitated by the staff of the faculty development center. During the program, faculty members experience the core course of the certificate program as "students" and enhance their knowledge of how people learn and of research-based teaching practices. The first four sessions of the program focus on research and theories of learning and development, learner-centered teaching and reflective practice. The next four sessions focus on integrated course design, various teaching methods and the effective use of technology in the classroom. The remaining four sessions focus on diversity and inclusive teaching, and microteaching.

The program reflects the two assumptions under the learning partnerships model-structured experiences that facilitate individuals' personal growth and development (Baxter Magolda, 2004)-that "knowledge is complex and socially constructed" (p. 41) and "authority and expertise are shared in mutual construction of knowledge among peers" (p. 42). First of all, through readings and activities, instructors are exposed to the idea that knowledge is socially constructed, a core value of the program. By participating in discussions, case studies and small group work, instructors are able to develop their own understanding of the material through the lenses of their backgrounds and disciplines. An important part of this process is that instructors come from different disciplines and thus are able to share their unique experiences and backgrounds and learn from each other.

Each session demonstrates relevant teaching activities by engaging faculty in the activities as learners and ending with a discussion of how faculty would teach the material to their graduate students. For example, while discussing integrated course design, instructors developed learning goals followed by assignments that were aligned with the goals. While discussing feedback and assessment, instructors developed rubrics. While discussing effective discussions, instructors participated in various techniques, such as Brookfield and Preskill's (2005) conversational moves and snowball technique. Instructors experienced various methods of small group work, collaborative learning, and effective discussion, including technological tools, throughout the program and received guidelines on how to use each method in their own classroom.

In addition to participating in the training program, each individual faculty member designs his or her own "teaching in the discipline" module for the course to address pedagogical issues common to his or her field. For example, the course taught in the physical sciences section provides lessons on how to teach lab or how to teach problem solving. Instructors have the opportunity to modify the course, but the staff of the faculty development center must approve the final syllabus as remaining sufficiently consistent with the established curriculum.

Methods

The main research questions of this study were: (1) In what ways did the training program influence participating faculty members' teaching conceptions, including opinions and attitudes related to teaching in general and themselves as educators? (2) In what ways did the program influence faculty members' teaching approaches, including adopted and intended teaching strategies? In order to gain an in-depth understanding of participating faculty members' experiences and the program's impact, qualitative research methods were employed (Merriam, 1998).

Twelve of the 16 faculty members who attended the training program during the summer of 2009 were interviewed. Four of the faculty members taught in the social sciences, four in sciences, two in humanities, one in arts, and one in health professions. Five were female and seven were male: ages ranged from 40 to 70. Eight instructors were White (one of whom was international) and four were Black (one of whom was international). Semi-structured interviews, which were conducted by either a researcher or research assistant, were audio taped and transcribed.

The theoretical orientation for the analysis was the grounded theory approach, which utilizes an emergent design, where patterns and themes emerge from the data (Glaser & Strauss, 1967). The constant comparative method of analysis, including comparing incidents that pertain to categories and integrating categories, was used (Lincoln & Guba, 1985). Two researchers conducted the analyses of the interviews independently and then compared analyses and reached consensus, which increased the reliability by employing investigator triangulation (Patton, 2002).

Findings

Teaching Conceptions

All of the 12 instructors indicated that their teaching conceptions, including opinions and attitudes related to teaching in general and themselves as educators, shifted in some way after participating in the training program. Seven themes emerged from the data; the themes, along with the number of instructors who mentioned them, are presented in Table 1.

The program helped instructors understand a student-centered approach and shift away from a teacher-centered approach. This was the most frequently emerging theme, present in interviews with seven instructors. One instructor noted that she started seeing teaching as a more collaborative process between instructors and students after participating in the training program. Another instructor noted that the program helped equip him with "tools to make the students part of the knowledge construction process." When asked whether her attitudes and beliefs about

Emergent Themes and Number of Instructors Who Mentioned Each Theme		
Theme	Number of	
("The training program led the instructor to ")	instructors	
understand and shift towards a student-centered approach.	7	
develop self-awareness and self-reflection as an educator.	5	
consider students' backgrounds, diversity, and developmental stages while teaching.	5	
become open to trying new teaching methods.	3	
change views on teaching, content, and course design.	2	
feel energized and confident as a teacher.	2	
gain interest and understanding of pedagogical theories and research in relation to practice.	2	

Table 1

Yeah, [they] changed. *A lot* changed. . . . [After the program] I know I need to lead the way and put myself into the *learning* side instead of teaching side. *Learning* with the students will probably end up better than *teaching* the students. . . . The philosophy they [the trainers at the program] have—*that* changed my view on teaching, totally.

The program facilitated instructors' selfawareness and self-reflection as educators. This theme emerged from interviews with five different instructors. For example, one instructor explained how he started reflecting on his teaching during the program and how he realized that a lot needed to change. Another instructor said that she became more conscious of pedagogical issues of which she had not previously been aware. One instructor noted that although she was still figuring out her personal approach to teaching, the training program provided her with some direction for developing it.

The program led instructors to consider students' backgrounds and developmental stages. This theme emerged from interviews with five different instructors who articulated that the training program helped them gain a broader perspective of where students are coming from and prompted them to further reflect on the importance of considering student diversity while teaching. One instructor indicated that the discussions on diversity during the program really helped her think about the topic, calling it "transformative." Another instructor noted,

Embracing diversity . . . that's something that occurred to me during training program. And it [the teaching method learned in the training program] was a way that I *might* be able to convey the same material to different kind of learners.

The program led instructors to become open to new teaching methods. This theme was present in three interviews. One instructor noted that "as a result of this program" she was "willing to try things" and was "open to experimentation." Another instructor pointed out that after completing the program, he thought, "Oh ok, now I'm ready to make huge changes [to my teaching]."

The program modified instructors' views on teaching, content, and course design. This theme was present in two interviews. One instructor explained how a specific activity in the program identifying and categorizing learning goals—changed her view on teaching and her notion of what course design entails: This [activity] was actually most useful in the sense that it really allowed me to rethink the whole process of teaching a course—to go beyond just selecting a textbook, writing a syllabus, and just singing a song for an entire semester. I got to think of this as an entire *process* that people have to go through and they need to come out of this whole experience with something of *value*, not just a bunch of data or whatever they're asked to reproduce.

The other instructor noted that he realized "how much work preparing" was and that it was not "always about the content."

The program led instructors to feel energized and confident as educators. This theme was present in two interviews. Emphasizing that the program "energized him about teaching," one instructor noted that he now felt "very confident" and "excited" about teaching. Another instructor stated that he "felt like his teaching mojo came back" after the program and that he "was energized and got back in touch with what makes him feel good about what he does" which he described as "having an impact on the success of students."

The program led instructors to gain interest and understanding of pedagogical theories in relation to practice. This theme was expressed by two instructors, one of whom pointed out that the training program helped him see the connection between best teaching practices and theories of learning. The other instructor explained his growing interest in pedagogy and educational research during the program:

I went into it with a *little* bit of knowledge about scholarship on teaching. I had been involved in that a little bit before. So I knew a *little* bit about where we were going. But I think for me it was a case of not knowing all that I *didn't* know and if anything it illustrated to me how broad and deep this field is and what the other areas of exploration are and here's more stuff that I *didn't* know was out there. So it's made me very curious to explore this more.

Teaching Approaches

Findings suggest that the training program influenced faculty's teaching approaches, including adopted and intended teaching strategies. All 12 of the instructors indicated that they started actively incorporating new strategies into their teaching after the program. A total of 16 specific teaching approaches emerged from the data and were grouped under six categories, which are presented in Table 2, along with the number of instructors who mentioned them.

Using active learning methods. There were four teaching approaches that faculty members adopted after

	Specific teaching	Number of
Categories	approach	instructors
Using active learning methods	4	12
Adopting and/or improving of instructional technology use	2	5
Improving feedback and assessment	2	3
Improving course design	2	2
Encouraging students to reflect on learning and assess own work	1	3
Other	5	5

 Table 2

 Teaching Approach Categories, Number of Specific Teaching Approaches, and

 Number of Instructors Who Mentioned Each Category

participating in the program that were grouped under this category. The teaching approaches, which emerged 15 times from the interviews with all 12 faculty members, can be considered active learning methods, which can be defined as any teaching method that engages students through meaningful learning activities (Prince, 2004).

The two most frequently emerging teaching approaches were using classroom discussions and small group work, each expressed by five instructors. While one instructor noted that the program helped him realize how small group work could actually function, another instructor stated, "[After the program] instead of rushing and just treating lecture as the standard, I decided to open it up more for student discussion and see what they had to say about it." One instructor pointed out that she started using different classroom discussion techniques, such as the snowball technique and conversational moves (Brookfield & Preskill, 2005).

The third teaching approach that fit this category was encouraging students to directly engage with the material through hands-on activities instead of lecturing, which was expressed by three instructors. One instructor said that he began breaking up lectures by incorporating engaging activities based on the techniques he learned during the training program.

The fourth teaching approach was encouraging students to ask questions and participate, which was expressed by two instructors.

Adopting and/or improving of instructional technology use. The two teaching approaches that were grouped under this category emerged from interviews with five different instructors, who noted that they started using instructional technology or improving their use of instructional technology after the program. Two instructors noted that they changed the way they used PowerPoint and increased the effectiveness of their use, while two others pointed out that they incorporated clickers—audience response systems integrated with PowerPoint that allow the audience to actively participate in the presentation—after using them in the program. One instructor said he started using blogs to encourage discussion among students.

Improving feedback and assessment. The two teaching approaches that were grouped under this category (providing detailed feedback with guidelines for improvement and using rubrics) emerged from interviews with three instructors. One instructor explained, "I look at their work, see what kind of mistakes they make, recommend certain procedures maybe for improving, giving them guidance."

Improving course design. The two teaching approaches that were grouped under this category emerged from interviews with two instructors. One instructor began developing learning objectives for his class after participating in the program:

By going through this process of selecting the teaching goals—I mean, there are all sorts of—I forgot the exact activity–but I remember I actually sat down and thought for a while how to actually make this *work*, how to put the categories and how to organize the entire thing—what do you want these people to come away with after it's a one-semester experience in such and such a thing.

Another instructor started focusing on the alignment of course elements, as the program taught him the importance of aligning learning goals and classroom activities. He also noted he was "much more in tune" with how various course elements should be integrated.

Encouraging students to reflect on learning and assess their own work. The teaching approach that fit this category emerged from interviews with three instructors. One instructor noted:

I really worked on getting my students to think about what they were learning, getting them to have a dialogue with *me* about *what* they were learning that I could then—actually it's a feedback loop—I could then incorporate and we can continue to grow.

Other. Five other teaching approaches emerged once from interviews with five instructors. One

instructor started linking the class material to what students can directly relate to after the training program:

I started to think of some things that I had not actually done; for instance, I came up with the idea of having students bring up their phones and I would bring in a scale . . . and explain to them what variables are-numeric, non-numeric-in the introductory lectures of the class. They brought their cell phones and weighed them and then I had them indicate what the brand was; whether it was touch screen; to talk about different kind of variables; how we would determine what kind of analysis to use depending on the type of data. And it got them out of their seats and it was one of the best first classes that I can remember having-it was an honors class. And I just felt a little fresher trying something new. It had been a long while since I had really tried something that different than just going over the syllabus and so on.

Another instructor began incorporating writing assignments, while one started providing students with opportunities for trial, error and improvement as he "tried to emphasize further, 'it's ok to be wrong while you're learning. You won't be penalized."" One instructor started incorporating creative research projects where students "research people prominent in the field." Another instructor began explaining connections between units and concepts by specifically pointing out how the different units were linked so that the students would understand the units' overall connection.

Discussion

Our findings suggest that the faculty training program influenced the 12 participating instructors' teaching conceptions and teaching approaches. All of the instructors indicated that their opinions and attitudes related to teaching in general and themselves as educators shifted in some way after the program, which was reflected in seven themes that emerged from the data. Similarly, all of the instructors indicated that the program had an impact on intended and adopted teaching strategies, and 16 teaching approaches emerged from the data. This study adds to the literature on the impact of pedagogical training programs for faculty, which is crucial in a period where there is an increasing recognition of the importance of such training (Light et al., 2009; Wilson, 2002). This kind of training, which is becoming a global trend (Gibbs & Coffey, 2004; Sonesson & Lindberg Sand, 2006; van Keulen, 2006), is often the only opportunity instructors get to learn about effective teaching practices.

The training program's influences on instructors' teaching conceptions and approaches fit the three categories outlined in Åkerlind's (2003) study reflecting academics' experiences of growth and development as educators: change within themselves, change in teaching practices, and change in learner outcomes. The first category, "teaching development as a change within the teacher" (Åkerlind, 2003, p. 380), is based on instructors' focus on themselves and on their increased "comfort and confidence with teaching" (p. 380). Our findings indicate that the program influenced instructors' experiences within this category. as the way they viewed themselves as educators shifted. Some instructors explicitly noted that the program increased their confidence and energy levels as educators, while others noted that they became more aware of themselves as educators and started to reflect on their teaching after the program.

Åkerlind's (2003) second category, "teaching development as a change in teaching practice" (p. 381), is based on instructors' focus on the quality of teaching and on developing "teaching skills, in terms of strategies and methods, teaching materials and/or knowledge of the area" (p. 381). This category also includes instructors' intention to become more effective educators. When compared to our study, this category reflects both teaching approaches (adopted and intended teaching strategies) and some of themes under teaching conceptions (including opinions and attitudes related to teaching). A major finding of our study is that the program led instructors to start using active learning methods, which promote student learning and are consistent with a student-centered teaching approach (Bonwell & Eison, 1991; Picciano, 2002; Weimer, 1991). This finding supports former research suggesting that faculty development programs enhance the use of learner-centered approaches (e.g., Gibbs & Coffey, 2004; Light et al., 2009; Postareff et al., 2007) and have a positive impact on faculty teaching (e.g., Coffey & Gibbs, 2000; Light, Luna, Drane, & Fleming, 2004). Furthermore, the program also influenced teaching conceptions; for example, some instructors became more open to trying new teaching methods, while some started viewing teaching, content matter and course design differently.

Åkerlind's (2003) third category, "teaching development as a change in outcomes for the learner"(p. 382), is based on instructors' focus on student learning and represents growth that "shows a critical expansion in the experience to include awareness of developmental changes for students" (p. 382). Thus, this category, which reflects instructors' adoption of a more student-centered orientation, is directly linked to a major finding of our study: the program not only helped instructors develop a better understanding of a student-centered approach but also led them to adopt a more a student-centered model while thinking of their teaching. For example, instructors realized, during the program, that they needed to focus on student learning as opposed to their own teaching, that teaching should be a collaborative effort between the student and instructor, and that they needed to move away from the notion that they are the sole center of the classroom. Instructors also began further reflecting on diversity-related issues and considering students' backgrounds and developmental stages while teaching.

Findings suggest that various aspects of the training program were effective in influencing participating instructors' teaching conceptions and approaches. An important feature of the program was its reflection of the assumptions that "knowledge is complex and socially constructed" (Baxter Magolda, 2004, p. 41) and "authority and expertise are shared in mutual construction of knowledge among peers" (p. 42). Additionally, the program's flexibility invited each instructor's input and modifications for the course they would teach. Instructors designed their own teaching in the discipline module for the course to address issues common to their field and modified the course's syllabus, as long as it remained sufficiently consistent with the established curriculum. Thus, the variety of their fields and the unique teaching challenges present in each field could be addressed.

The program's format, which prompted instructors to participate in various teaching and learning activities as learners, effectively provided them a toolbox for teaching and resulted in instructors incorporating the activities in their own teaching, feeling more confidence and energy in regards to teaching and adopting a more student-centered model. Extensive discussions and activities on reflective teaching. intellectual development, inclusive teaching and universal design influenced instructors' self-awareness as educators and approach to students' backgrounds and needs. For example, after reflective teaching was explained, instructors discussed their own powerful learning experiences and the facilitators pointed out the common characteristics of the experiences. After instructors heard about the demographics of the university's student population, they filled out a worksheet with questions prompting them to explore their own backgrounds, attitudes, and prejudices while teaching, such as "Do you inadvertently undervalue comments made by speakers whose English is accented differently from your own?" While this activity was private, it was opened to discussion for those who wanted to share.

The facilitators of the program implemented the practices of reflective teaching and student-centered teaching by meeting after each session to discuss what worked, what didn't work and what needed be improved and addressed. They created the following session's lesson plan based on the experiences from that day's session and the needs and wants of the instructors.

The context in which the program flourished is also important, as context is crucial in educational research (Howell, 2008). The training program is part of a graduate student certificate program on teaching in higher education that was created by the staff of the university's faculty development center after the invitation of the provost. The Provost's support for the initiative to improve graduate students' teaching expertise influenced many deans and faculty, and the faculty development center met with schools and colleges to enlist their support. Meanwhile, faculty members who participated in the training program were recognized as leaders in teaching and were nominated by the Dean's office. It was important for faculty to hear from their colleagues that the program was an opportunity for growth.

Conclusion

Participating faculty's gains and transformations through the training program suggest that the program model is especially promising, since all the results took place in spite of the fact that the program was only 5-6 weeks long and consisted of 12 three-hour sessions, which is not long: former research indicates that teaching conceptions and approaches change slowly (e.g., Postareff et al., 2007) and that paradigm shifts take time to occur (Kuhn, 1970). Of course, the outcomes of this study reveal the immediate results of the program, not the long-term results; future research will investigate the long-term impact of the program as well as explore changes in student learning outcomes based on instructors' changing teaching conceptions and approaches after participation. Although the current study cannot determine the program's indirect influence on student learning, increase in student learning outcomes may be foreshadowed by the instructors' adoption of various student-centered teaching strategies learned during the program, which lead to active learning and, and in turn, to enhanced learning outcomes. It should also be noted that since faculty were nominated by the dean's office and volunteered to participate in the program, it is most likely that they were already prone to modifying their teaching approaches.

The main aspects of the program that facilitated its success were: (a) its core values, including constructivism and student-centered teaching; (b) its inclusion of instructors from different disciplines and the acknowledgement that each field brings with it a different set of teaching challenges; (c) its format prompting instructors to participate in teaching and learning activities as learners; and (d) its inclusion of extensive discussions and activities related to reflective and inclusive teaching, diversity, and self-awareness. Additionally, program facilitators created each session's lesson plan according to the needs and wants of the instructors. The support of the provost and the positive association related to the program were also helpful factors in its success.

This is the preliminary study of a longitudinal research project where yearly iterations of the faculty training program are explored. This study focused on the participants of the first training program, which took place in 2009; currently interviews with the participants of the second and third iterations of the training program, which took place in 2010 and 2011, are being analyzed.

References

- Åkerlind, G. S. (2003). Growing and developing as a university teacher—Variation in meaning. *Studies in Higher Education* 28(4), 375-390. doi:10.1080/0307507032000122242
- Baxter Magolda, M. B. (2004). Learning partnerships Model: A framework for promoting selfauthorship. In M. B. Baxter Magolda & P. M. King (Eds.), *Learning partnerships: Theory and models* of practice to educate for self-authorship (pp. 37-62). Sterling, VA: Stylus.
- Benek-Rivera, J., & Matthews, V. E. (2004). Active learning with jeopardy: Students ask the questions. *Journal of Management Education*, 28, 104-118. doi:10.1177/1052562903252637
- Blanchard, M. R., Southerland, S. A., Osborne, I. W., Sampson, V. D., Annetta, L. A., & Granger, E. M. (2010). Is inquiry possible in light of accountability?: A quantitative comparison of the relative effectiveness of guided inquiry and verification laboratory instruction. *Science Education*, *94*, 577-616. doi:10.1002/sce.20390
- Bonwell, C. C., & Eison, J. A. (1991). Active learning: Creating excitement in the classroom (ASHE-ERIC Higher Education Report No. 1).
 Washington, DC: George Washington University. Retrieved from ERIC database. (ED340272)
- Boyer, E. (1990). *Scholarship reconsidered*. Princeton, NJ: Carnegie Endowment for the Advancement of Teaching.
- Brookfield, S. D., & Preskill, S. (2005). *Discussion as a way of teaching: Tools and techniques for democratic classrooms* (2nd ed.). San Francisco, CA: Jossey-Bass.
- Coffey, M., & Gibbs, G. (2000). Can academics benefit from training? Some preliminary evidence. *Teaching in Higher Education*, *5*, 385-389. doi:10.1080/713699136
- Derting, T. L., & Ebert-May, D. (2010). Learnercentered inquiry in undergraduate biology:

Positive relationships with long-term student achievement. *Cell Biology Education*, *9*, 462-472. doi:10.1187/cbe.10-02-0011

- Donche, V., & Van Petegem, P. (2011). Teacher educators' conceptions of learning to teach and related teaching strategies. *Research Papers in Education, 26*(2), 207-211. doi:10.1080/02671522.2011.561979
- Eggins, H., & MacDonald, R. (Eds.). (2003). *The* scholarship of academic development. Buckingham, UK: The Society for Research into Higher Education.
- Eley, M. E. (2006). Teachers' conceptions of teaching, and the making of specific decisions in planning to teach. *Higher Education*, 51, 191-214. doi:10.1007/s10734-004-6382-9
- Fairweather, J. (2005). Beyond the rhetoric: Trends in the relative value of teaching and research in faculty salaries. *Journal of Higher Education*, 76(4), 401-422. doi:10.1353/jhe.2005.0027
- Gibbs, G., & Coffey, M. (2004). The impact of training of university teachers on their teaching skills, their approach to teaching and the approach to learning of their students. *Active Learning in Higher Education*, 5, 87-100. doi:10.1177/1469787404040463
- Glaser, B. G., & Strauss, A. L. (1967). *The discovery of* grounded theory: Strategies for qualitative research. Chicago, IL: Aldine.
- Gunersel, A. B., Barnett, P., & Etienne, M. (2013). Promoting self-authorship of college educators: Exploring the impact of a faculty development program. *Journal of Faculty Development*, 27(1), 35-44.
- Henderson, C., Beach, A., & Finkelstein, N. (2011). Facilitating change in undergraduate STEM instructional practices: An analytic review of the literature. *Journal of Research in Science Teaching*, 48(8), 952-984. doi:10.1002/tea.20439
- Ho, A., Watkins, D., & Kelly, M. (2001). The conceptual change approach to improving teaching and learning: An evaluation of a Hong Kong staff development programme. *Higher Education*, 42, 143-169. doi:10.1023/A:1017546216800
- Howell, D. C. (2008). Fundamental statistics for behavioral sciences (6th ed.). Belmont, CA: Thomas Wadsworth.
- Huber, M. T. (2004). *Balancing acts: The Scholarship* of *Teaching and Learning in academic careers*. Washington, DC: American Association for Higher Education and the Carnegie Foundation for the Advancement of Teaching.
- Kember, D. (1997). A reconceptualisation of the research into university academics' conceptions of teaching. *Learning and Instruction*, 7(3), 255-275. doi:10.1016/S0959-4752(96)00028-X
- Kember, D., & Kwan, K.-P. (2000). Lecturers' approaches to teaching and their relationship to conceptions of

good teaching. *Instructional Science* 28, 469-490. doi:10.1023/A:1026569608656

- Kember, D., & Gow, L. (1994). Orientations to teaching and their effect on the quality of student learning. *Journal of Higher Education*, 65(1), 58-74. doi:10.2307/2943877
- Kuhn, T. S. (1970). *The structure of scientific revolutions*. Chicago, IL: University of Chicago Press.
- Leslie, D. W. (2002). Resolving the dispute: Teaching is academe's core value. *Journal of Higher Education*, 73(1), 49-73. doi:10.1353/jhe.2002.0008
- Light, G., Calkins, S., Luna, M., & Drane, D. (2009). Assessing the impact of a year-long faculty development program on faculty approaches to teaching. *International Journal of Teaching and Learning in Higher Education, 20*(2), 168-181.
- Light, G., Luna, M., Drane, D., & Fleming, V. (2004, April). *Transforming pre-tenure faculty approaches to teaching: Faculty development at a research university*. Paper presented at the annual meeting of the American Educational Research Association, San Diego, CA.
- Lincoln, Y. S., & Guba, E. G. (1985). *Naturalistic inquiry*. Thousand Oaks, CA: Sage.
- Merriam, S. B. (1998). *Qualitative research and case study applications in education* (2nd ed.). San Francisco, CA: Jossey-Bass.
- Norton, L., Richardson, J. T. E., Hartley, J., Newstead, S., & Mayes, J. (2005). Teachers' beliefs and intentions concerning teaching in higher education. *Higher Education*, 50, 537-571. doi:10.1007/s10734-004-6363-z
- Oosterheert, I. E., & Vermunt, J. D. (2003). Knowledge construction in learning to teach: The role of dynamic sources. *Teachers and Teaching: Theory and Practice*, 9, 157-173. doi:10.1080/13540600309376
- Patton, M. Q. (2002). *Qualitative research and evaluation methods*. Thousand Oaks, CA: Sage.
- Picciano, A. G. (2002). Beyond student perceptions: Issues interaction, presence, and performance in an online course. *Journal of Asynchronous Learning Network*, 6, 20-41.
- Postareff, L., Lindblom-Ylänne, S., & Nevgi, A. (2007). The effect of pedagogical training on teaching in higher education. *Teaching and Teacher Education*, 23, 557-571. doi:10.1016/j.tate.2006.11.013
- Pratt, D. D. (1997). Reconceptualizing the evaluation of teaching in higher education. *Higher Education*, 24, 23-44. doi:10.1023/A:1003046127941
- Prince, M. (2004). Does active learning work? A review of the research. *Journal of Engineering Education*, *93*(3), 223-231. doi:10.1002/j.2168-9830.2004.tb00809.x

- Prosser, M., & Millar, R. (1989). The "how" and "what" of learning physics. *European Journal of Psychology of Education*, 4, 513-528. doi:10.1007/BF03172714
- Prosser, M., & Trigwell, K. (1999a). Relational perspectives on higher education teaching and learning in the sciences. *Studies in Science Education*, 33, 31-60. doi:10.1080/03057269908560135
- Prosser, M., & Trigwell, K. (1999b). Understanding learning and teaching: The experience in higher education. Buckingham, UK: Society for Research into Higher Education and Open University Press.
- Rice, R. E. (1992). Toward a broader conception of scholarship: the American context. In T. G. Whiston & R. L. Geiger (Eds.), *Research and higher education in the United Kingdom and the United States* (pp. 117-129). Lancaster, UK: Society for Research into Higher Education.
- Richardson, J. T. E. (2005). Students' approaches to learning and teachers' approaches to teaching in higher education. *Educational Psychology*, 25, 673-680. doi:10.1080/01443410500344720
- Samuelowicz, K., & Bain, J. D. (1992). Conceptions of teaching held by academic teachers. *Higher Education*, 24, 93-112. doi:10.1007/BF00138620
- Samuelowicz, K., & Bain, J. D. (2001). Revisting academics' beliefs about teaching and learning. *Higher Education*, 41, 299-395. doi:10.1023/A:1004130031247
- Sarason, Y., & Banbury, C. (2004). Active learning facilitated by using a game-show format, or who doesn't want to be a millionaire? *Journal of Management Education*, 28, 509-518. doi:10.1177/1052562903260808
- Sonesson, A., & Lindberg Sand, A. (2006, June). *Compulsory higher education teacher training in Sweden—A nucleus for scholarship of teaching and learning.* Paper presented at the 6th Conference of the International Consortium for Educational Development, Sheffield, UK.
- Tanner, K., & Allen, D. (2006). Approaches to biology teaching and learning: On integrating pedagogical training into the graduate experiences of future science faculty. *CBE-Life Sciences Education*, 5, 1-6. doi:10.1187/cbe.05-12-0132
- Trigwell, K. (2003). A relational approach model for academic development. In H. Eggins & R. Macdonald (Eds.), *The scholarship of academic development* (pp. 23-33). Buckingham, UK: Society for Research into Higher Education.
- Trigwell, K., & Prosser, M. (1991). Improving the quality of student learning: The influence of learning context and student approaches to learning on learning outcomes. *Higher Education*, 22, 251-266. doi:10.1007/BF00132290

- Trigwell, K., & Prosser, M. (2004). Development and use of the approaches to teaching inventory. *Educational Psychology Review*, 16(4), 409-424. doi:10.1007/s10648-004-0007-9
- van Driel, J., Verloop, N., van Werven, H., & Dekkers, H. (1997). Teachers' craft knowledge and curriculum innovation in higher engineering education. *Higher Education*, 34, 105-122. doi:10.1023/A:1003063317210
- van Keulen, H. (2006, June). *Staff development and basic teacher qualification systems in The Netherlands, with a focus on Utrecht University.* Paper presented at the 6th Conference of the International Consortium for Educational Development, Sheffield, UK.
- Watkins, R. (2005). Developing interactive e-learning activities. *Performance Improvement*, 44, 5-7. doi:10.1002/pfi.4140440504
- Weimer, M. (1991). *Improving college teaching*. San Francisco, CA: Jossey-Bass.
- Wilson, R. (2002, March 22). Report says undergraduate education has improved in recent years. *The Chronicle of Higher Education*, p. A12.
- Wood, K. (2000). The experience of learning to teach: Changing student teachers' ways of understanding

teaching. *Journal of Curriculum Studies*, *32*(1), 75-93. doi:10.1080/002202700182862

Wright, M. (2005). Always at odds?: Congruence in faculty beliefs about teaching at a research university. *Journal of Higher Education*, 76(3), 331-353. doi:10.1353/jhe.2005.0025

ADALET BARIS GUNERSEL, PhD, earned her degree in Educational Psychology at Texas A&M University and is the former Assistant Director of the Teaching and Learning Center at Temple University.

MARY ETIENNE, MA, is the Assistant Director of Operations and Assessment at the Temple University Teaching and Learning Center. She has a master's degree in Geography and Urban Studies from Temple University.

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