

# Professional Development for Teaching in Higher Education: Faculty Perceptions and Attitudes

Author: Jessica Rose Pesce

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Boston College  
Lynch School of Education

Department of Educational Leadership and Higher Education

Program in Higher Education

PROFESSIONAL DEVELOPMENT FOR TEACHING IN HIGHER  
EDUCATION: FACULTY PERCEPTIONS AND ATTITUDES

Dissertation  
by

JESSICA R. PESCE

submitted in partial fulfillment  
of the requirements for the degree of  
Doctor of Philosophy

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**Professional Development for Teaching in Higher Education:  
Faculty Perceptions and Attitudes**

**Dissertation by:  
Jessica Pesce**

**Dissertation Director:  
Dr. Karen Arnold**

**Abstract**

Faculty members in higher education typically have been trained in their subject matter but not in pedagogy (Austin, 1992; Healey, 2000). With increased concerns over the rising cost of college, traditional institutions of higher education face scrutiny and external challenges to their stability. Higher education groups and the public at large have called into question the teaching skills and preparedness of faculty members (Altbach, 2011), often criticizing their lack of interest in teaching and preference for research (Advisory Committee to the National Science Foundation, 1996). As a result, a growing number of institutions have developed means for supporting and enhancing teaching on campus. Despite studies that demonstrate the effectiveness of such programs (Coffey & Gibbs; 2001; 2004; Van Note Chism & Szabo, 1998), faculty participation in professional development for teaching remains low (MacKinnon, 2003; Sorcinelli, 2006).

This mixed-methods study uses survey and interview data from full-time faculty (n = 432) at two research-intensive universities in the Northeastern United States to determine their attitudes and preferences regarding professional development for teaching in order to increase participation rates. Statistical tests showed significant differences by demographic groups; female and non-tenure track faculty are more likely to attend professional development, more likely to view it positively, and more likely to feel it is undervalued on campus. No significant

differences were found by discipline or institution. Semi-structured, follow-up interviews were conducted with 11 faculty members. The findings showed that faculty perceive that their institutions do not value teaching. With limited time, faculty feel compelled to prioritize research over teaching, despite wanting to devote more attention to teaching. Other issues they discussed were: work-life balance, lack of preparation for teaching in graduate school, preferred topics and formats for programs, messages received from the administration, and the desire to collaborate with other faculty. The findings are analyzed using Bronfenbrenner's (1979; 1993; 1995) ecological systems theory to develop a full picture of faculty members' ecologies. The study concludes with recommendations for program facilitators, administrations, and future research.

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## **CHAPTER I: Problem Statement & Overview**

### **Research Problem**

Accountability for student learning is an area of rising concern in American higher education today. Increased tuitions, declining state and federal appropriations, and the 2005 Spellings Commission on the Future of Higher Education have pushed the public, the government, and advocacy groups to call for increased proof that colleges and universities are effectively accomplishing their teaching and learning goals. As a result, a growing number of institutions have focused on demonstrating the learning outcomes of their students; inevitably, these learning outcomes are tied to the instruction being delivered by faculty members (Austin, 1992; Gow & Kember, 1993; Neumann, 2005), with the assumption that high quality teaching will lead to improved learning outcomes and higher retention rates, thus ensuring that families' tuition dollars and state and federal funds are being well spent.

Faculty members, for the most part, have been trained in their subject matter but not in pedagogy (Austin, 1992; Austin, 2002; Austin & McDaniels, 2006; Brew, Boud & Namgung, 2011; Healey, 2000). As institutions are facing more scrutiny, higher education groups and the public at large have called into question the teaching skills and preparedness of faculty members (Altbach, 2011), often criticizing their lack of interest in teaching and preference for research (Advisory Committee to the National Science Foundation, 1996). With increasing college tuitions and the rise of online education, including competition from free providers, it is even more imperative that faculty members are trained to deliver a quality educational product that potential students and their families consider worthwhile among cheaper, more convenient alternatives. As a result, many institutions have developed means for supporting and enhancing

teaching on campus. Some universities have created extensive teaching centers, while others offer workshops, long-range programs, tutorials, one-on-one consulting, orientations, websites, and other tools (Austin, 1992; Van Note Chism, Lees & Evenbeck, 2002). While many researchers have attempted to measure the effectiveness of such professional development initiatives for teaching (Coffey & Gibbs, 2000; 2001; 2004; Van Note Chism & Szabo, 1998), few have investigated faculty members' attitudes towards such programs and the reasons why participation rates are often very low (MacKinnon, 2003; Sorcinelli, 2006). If faculty are not attending professional development programs, it is difficult to help them improve their teaching practices. Research into their attitudes and perceptions can ultimately help develop teaching support and professional development programs that will be more useful to faculty, which will in turn increase participation and likely lead to more attention paid to teaching. Improved teaching should lead to better learning outcomes for students.

While the scholarship of teaching and learning is gaining importance in America, teaching still takes a back seat to research at most colleges and universities in this country (Advisory Committee to the National Science Foundation, 1996; Healey, 2000), and this can cast a negative light on higher education. Families going into debt for a college education do not understand why faculty are not paying more attention to their teaching skills. Many studies show professional development programs can aid in improving faculty members' teaching skills, based on both their own perceptions and those of their students (Chang, Lin & Song, 2011; Coffey & Gibbs, 2000; 2001; 2004). Professional development can help improve student learning outcomes, but only if faculty actually participate.

If American higher education is to answer the calls for accountability and demonstrate the value of the college classroom experience, faculty members and administrators need to work

together to ensure they are providing a good product for their students. Faculty members should focus on their teaching and pedagogy in the same ways they analyze their disciplines (Healey, 2000), and institutional cultures need to “elevate learning to a position of importance on par with the discovery of new knowledge” (Advisory Committee to the National Science Foundation, 1996). Professional development programs aimed at teaching enhancement are one way to call attention to classroom practices, yet it is often challenging to attract busy faculty members to these programs. Understanding what might draw faculty to professional development programs, as well as faculty members’ attitudes and preferences, will enable institutions and organizations to create more effective and enticing opportunities for engagement, ultimately leading to improved educational experiences for students. It is necessary to understand why faculty members are not attending professional development for teaching in order to create targeted programming that will meet their needs.

As the following discussion shows, the scholarship surrounding higher education teaching and its evaluation in the United States needs to be reframed; if the U.S. is to continue promoting world-class universities and quality education, it is imperative that teaching be a high priority. In addition, with the rise of massive online open courses (MOOCs) and other forms of online education, face-to-face teaching becomes one of the most important ways for traditional brick and mortar institutions to remain relevant. Expensive, traditionally residential campuses are especially at risk of losing students if they cannot justify their existence. If considerable attention is not paid to enhancing teaching on college campuses, then the entire landscape of American higher education could shift to an electronic model in the very near future.

### **Research Questions**

The problem of prioritizing research over pedagogy is presumably worst at

research-intensive universities where faculty understand that their research activities determine the success of their careers. In fact, “at major research universities, the most prestigious faculty appointments are those with no teaching responsibilities” (Advisory Committee to the National Science Foundation, 1996), thus sending the message that teaching is valued less than research.

Therefore, a study is needed on how to reach faculty at these institutions to assist with teaching enhancement. The research question for this study is: what are faculty members’ attitudes towards and perceptions of professional development programs for teaching on campus?

Subquestions include: 1) How might these attitudes and perceptions affect individual participation? 2) What type of professional development for teaching would faculty like to attend and see offered on their campuses? 3) How, if at all, do faculty demographic characteristics and professional contexts affect their attitudes and perceptions?

### **Rationale for Study**

In recent years, numerous scholars have attempted to measure the effectiveness of professional development programs on teaching in higher education (Chang, Lin & Song, 2011; Coffey & Gibbs, 2000; 2001; 2004). However, only a few studies have looked at faculty perceptions of these programs. Of those that do exist, all focus on one particular subsection of faculty, such as pharmacy faculty (MacKinnon, 2003) or faculty in a specific learning community (Malik, 2012). Others studies examine the perception of professional development for technology or for culturally responsive classroom practices, instead of professional development specifically aimed at enhancing teaching. Very few researchers have surveyed faculty to understand their attitudes, opinions, and desires regarding professional development programs for teaching.

In addition, there is no literature that specifically addresses faculty in a broad variety of disciplines at research-intensive universities. Faculty members at these institutions may be subject to conflicting messages from their administration and professional organizations about the balance between teaching and research, with research likely being emphasized over teaching, even though many of them spend a significant amount of time teaching students. In addition, the messages regarding research and teaching are likely to vary by discipline. Therefore, faculty members' perceptions and attitudes regarding professional development are likely to be conflicted and diverse. This study aims to uncover what these faculty members currently believe about professional development for teaching in order to inform practices in teaching centers to better suit faculty needs and encourage their participation.

### **Theoretical Orientation**

Faculty members in higher education are a heterogeneous group with varying goals, roles, and priorities. As higher education becomes more and more diversified, so too does the face of the faculty and the role of the professoriate (Altbach, 2011). Faculty members in American higher education are coming from differing backgrounds in terms of culture, home country, age, gender, race, and career preparation (Trower & Chait, 2002). Once they reach the professoriate, they are faced with competing roles and priorities, especially in regard to their dual roles as researcher and teacher. Some other issues they deal with include work-life balance, the role of tenure, the increased reliance on part-time faculty, reward systems, and conflicting messages from administrations and professional organizations. O'Meara, Terosky and Neumann (2008) identify elements of faculty careers that they say lead to a "narrative of constraint," including under-resourced campuses, increased workloads, unfair tenure systems, managerial

reform, poor working environments, lack of support and mentoring, and isolation. All these elements add up to a multifaceted and complicated picture of faculty members' environments.

Any project that seeks to study faculty members' attitudes and perceptions would have to examine the whole context of a faculty member's ecology in order to understand how the numerous elements impacting their lives work (or do not work) together. Urie Bronfenbrenner's (1979; 1993; 1995) ecological systems theory is well-suited to analyzing the competing demands on a faculty member's attention. Since this study aims to determine how faculty view professional development opportunities on their campuses, the ecological systems theory will help elucidate the whole picture of faculty members' lives to see where professional development may or may not fit in. This model focuses on person-process-context-time to understand the whole environment that impacts a person's development. In terms of faculty, this model is useful because it enables analysis based on all elements of a faculty member's dual roles as researcher and teacher. A major conflict for faculty members is how to balance these two demanding job descriptions, often in the face of conflicting messages from institutional administrators, professional organizations, peers, and life roles outside of the academy. Examining their attitudes and preferences with the lens of Bronfenbrenner's (1979; 1993; 1995) theory will help illustrate these numerous micro-, meso-, and exosystems that all work together to impact faculty member's decision whether to attend professional development programs.

### **Bronfenbrenner's Ecological Systems Theory**

In 1977, Urie Bronfenbrenner determined that a broader approach to research on human development was needed. He argued that previous scholars had focused too narrowly on studying humans in a limited or often contrived environment, which would not aid in



understanding human development as a whole. Instead, he began developing a more ecological approach that would “focus on the progressive accommodation, throughout the life span, between the growing human organism and the changing environments in which it actually lives and grows” (Bronfenbrenner, 1977, p. 513). This approach would take into account both the immediate settings in which a person lives as well as the larger social contexts affecting those settings; for this reason, Bronfenbrenner often refers to his approach as the person-process-context-time model (PPCT) (Bronfenbrenner, 1993; 1995). Refining this theory in a monograph published in 1979, Bronfenbrenner described a person’s ecological environment as a nested arrangement of structures where each level is contained within the next.

The innermost level is the individual. The elements that affect the person as an individual are demographics, age, and developmentally instigative characteristics, as Bronfenbrenner (1993) calls them. These are “personal qualities that invite or discourage reactions from the environment...that can disrupt or foster processes of psychological growth” (Bronfenbrenner, 1993, p. 11). These characteristics also encompass a person’s selective responsivity, or the responses and attraction one has to physical and social environments. Structuring proclivities are also part of an individual’s developmentally instigative characteristics. These are the tendency one has to seek out and “persist in progressively more complex activities” (Bronfenbrenner, 1993, p. 12). Lastly, an individual’s directive beliefs are also part of their developmentally instigative characteristics; these are the beliefs one has about one’s relationship with the environment and others. All these elements affect the person on an individual level. In terms of faculty members, one’s developmentally instigative characteristics affect the way one behaves in the classroom. The attraction an individual has to physical and social environments could affect the way in which a faculty member prefers to teach; for

example, a faculty member could prefer to teach in a lecture format because he or she feels comforted by the dynamic in which he or she is the expert dictating factual information to a passive group. Other faculty members' developmentally instigative characteristics may make them more inclined to teach in a discussion-based format because he or she enjoys more interaction with the students.

The next level beyond the individual is the microsystem level. Microsystems are comprised of the immediate environment in which a person lives. This includes the places, pattern of activities, roles, and interpersonal relationships that affect one's growth either positively or negatively (Bronfenbrenner, 1979; 1993; 1995). For faculty members in higher education, microsystems include their workplace, colleagues, department, students, mentors, research, families, children, and so on.

The mesosystem, which is the next level, is composed of the interactions between two or more microsystems. Most importantly, the mesosystem is made up of the effects that these interactions might have on the development of the individual, since these effects can either promote or inhibit growth (Bronfenbrenner, 1979; 1993). For faculty members, the mesosystem could contain the relationship between their workplace and their families, for instance, or the interaction between their research and their students.

The exosystem is the larger system of policies and structures that come from the beliefs and ideologies of the macrosystem. In the exosystem, there are often formal and informal social structures that do not directly contain the individual, but that impact the individual's microsystems (Bronfenbrenner, 1979; 1993). These can contain major institutions that are a part of the society in which the individual lives; for most people, these would be institutional policies of the workplace, medical issues and policies, policies at a family member's school or work, the

mass media, the government, transportation, social networks, etc. For faculty in particular, most institutional policies of the university are in the exosystem, including tenure and promotion procedures, the academic calendar, insurance and benefits, etc. Faculty often also belong to disciplinary societies, which are also part of their exosystem, as is the culture of higher education as a whole.

In terms of professional development for teaching on college campuses, the programming and administrators involved would be part of an individual's exosystem. This is the level at which professional development can make an impact on a faculty member's life. Though repeated, intense interactions with a Teaching Center, for instance, might result in a microsystem level impact, most faculty will experience professional development as an institutional policy at the exosystem level.

The macrosystem is the largest system of the ecology, encompassing the culture in which one lives. This contains cultural values, norms, and beliefs, along with those of any subcultures to which the individual belongs. In most developed countries, this consists of any laws and regulations that are formalized, as well as any other economic, social, educational, and political patterns. For American higher education faculty, for example, the macrosystem contains societal and cultural expectations, norms, and values, along with the American economic, legal, and educational structures and ideologies.

Cutting across all these systems, as opposed to being nested inside them, is the chronosystem. This refers to both the time period in which one is living (historical elements) as well as one's stage in life (biological elements) (Bronfenbrenner, 1993; 1994; 1995). It can also encompass one's family history and the historical position of one's subcultures. For example, a woman living in the 20<sup>th</sup> century experiences a different chronosystem than a woman living in

the 18<sup>th</sup> century, not only in terms of technological and historical developments, but also in terms of the role of women in society. This also applies to cultural groups, where an Italian American living in the early 1900s would experience a different chronosystem than one living in the 1990s in terms of the opportunities available to them. For faculty, the biological chronosystem is varied, since faculty usually enter the full-time workforce around the age of 30 and are now retiring well past the traditional retirement age of 65 (Altbach, 2011). Faculty experience numerous different life roles throughout their careers; for example, some might begin with no children, then become a parent, and then become a grandparent. They also differ in terms of historical chronosystem depending on their gender, race, and ethnicity, as discussed above. While all faculty in America experience the same historical chronosystem in that they are working in the early 21<sup>st</sup> century, they can experience these historical events in different ways based on their individual characteristics; for example, faculty who were just entering the job market during the economic downturn of 2008 would have had faced different obstacles than faculty members who already had tenure in that year.

However, some aspects of the historical chronosystem can affect this generation of faculty in similar ways. The 21<sup>st</sup> century presents technological opportunities, job opportunities, economic realities, and so on that faculty in previous generations may not have experienced. Increased technology use due to the specific time of our current chronosystem, for example, might impact faculty ecologies in that the lines between home and work are blurrier than they were for previous generations of faculty members since faculty might feel compelled to answer student emails on the weekends or after hours.

Bronfenbrenner added to his theory in later years when he begins using the terms “bioecological paradigm” (Bronfenbrenner, 1995) and “bioecological model” (Bronfenbrenner,

2006) to describe his person-process-context-time approach to developmental theory. He argues for the importance of proximal processes as a means of development; proximal processes are his term for the interactions between the person and the environment. Those that result in increased complexity lead to a maximum gain in development (Bronfenbrenner 1993; 1995; 2006). Most importantly, he links these to what he sees as appropriate research designs for studies on human development. He states that, “the inclusion of both beliefs and corresponding behaviors in the same research design considerably enhances the explanatory power of analytic models in developmental science” (Bronfenbrenner, 1995, p. 631). This relates to the study of faculty attitudes and preferences regarding professional development because, according to Bronfenbrenner, a survey design or interview protocol should include questions that elicit information on faculty members’ beliefs *and* behaviors in order to understand how the two interact.

Bronfenbrenner’s (1979; 1993) theory is also useful in understanding faculty attitudes and perceptions because it takes into account the influence of significant others on an individual’s development. Bronfenbrenner (1993) has shown that the beliefs of family members, colleagues, mentors, spouses, friends, and others can affect an individual’s own beliefs. He states that, “the belief systems of such ‘others’ can function as instigators and maintainers of reciprocal interaction with the developing person” (Bronfenbrenner, 1995, p. 638). This is important because faculty members have many roles and interact with numerous significant others including colleagues, department chairs, administrators, collaborators, and students, not to mention their own families and roles they might hold outside the academy. Therefore, the beliefs these other groups hold about professional development for teaching are likely to affect how faculty members perceive professional development as exosystem factors; in fact, they are

likely experiencing conflicting beliefs from these constituencies, which could create an even more developmentally difficult ecology for the individual who is trying to make sense of his or her own beliefs and perceptions.

Bronfenbrenner (1995) also argues that not enough research designs consider the role of time and timing in an individual's environment. He states that a major factor that influences the outcome of human development is the "timing of biological and social transitions as they relate to the culturally defined age, role expectations, and opportunities occurring throughout the life course" (Bronfenbrenner, 1995, p. 641). This is especially relevant for faculty members, whose life courses may not follow stages that are similar to other working professionals. Life stage theorists (see Chickering & Havinghurst, 1981; Erikson, 1950; Havinghurst, 1972; Levinson, 1978; Loevinger, 1976, for examples) present varying paradigms for the adult years that lay out specific tasks that they believe adults accomplish during these chronological age stages. For example, Chickering and Havinghurst's (1981) Midlife Transition, which occurs from 35-45, requires individuals to revise career plans and redefine family relationships. In Middle Adulthood (45-57), individuals generally work to maintain a career or develop a new one, restabilize family relationships, make mature civic contributions, and adjust to biological changes that come with age. In the Late Adult Transition (57-65), individuals prepare for retirement, while in Late Adulthood (65+), they adjust to retirement, adjust to declining health and strength, prepare for living arrangements or the death of a spouse, and maintain integrity.

It is important to note here that all of these life stage theorists present a standardized, idealized path of work and life for individuals that assumes, in most cases, a career and marriage. Based on the age ranges presented in their theories, these researchers are not considering the career and life trajectories of higher education faculty members. For example, Chickering and

Havinghurst (1981) note that adults may change their careers in the ages of 35-45; this is not typical for faculty members, who are often achieving tenure during that period. In addition, they talk about preparing for retirement around the ages of 57-65; however, faculty members often work until later in their lives, and they retire at later ages than previous generations of faculty members did (Altbach, 2011). These differences are not just a result of biological transitions, as Bronfenbrenner would call them, but also a result of social transitions and culturally defined age and role expectations. Faculty members experience different age and role expectations than most other members of society, and as a result, they go through career and life transitions and stages later than the average person. For female faculty, for example, peak childbearing years often coincide with the years in which they take their first academic position and must begin working on their tenure dossiers. In other professions, females may have already been working for more years and attained a more stable work environment by the time they reach their peak childbearing years.

In addition, the “opportunities occurring throughout the life course” (Bronfenbrenner, 1995, p. 641) are different for faculty members than average professionals because their career trajectories are more rigid. For example, it is impossible to become tenured without following the traditional requirements that academia has set forth as standard, just as it is rarely possible to become a full professor without becoming an associate professor first. Therefore the social transitions in terms of careers are more prescribed for faculty members (and they have less control over the timing of it) than for people in other fields.

Historical time also affects faculty members in terms of the academic job market. In previous generations, about 80% of higher education faculty members were tenured or on the tenure track. Currently, that number has decreased to around 50% of all faculty in the U.S.

(Altbach, 2011). It is harder for Ph.D.s to obtain a tenure-track job than ever before, and as a result, many of them take part-time work for several years before (in the best case scenario) landing a tenure track job at a later age than members of previous generations. All these factors move social transitions later in an individual's chronology, which is another reason that Bronfenbrenner's (1993) person-process-context-time model is better suited to understanding the ecology of faculty members.

Bronfenbrenner mainly applied his ecological systems theory to the study of early childhood development, especially the way in which interactions between children and their parents shape developmental patterns (1979; 1993; 2006). However, there are a few examples of its application in the field of higher education. For example, Renn (2003) used an ecological model of human development to study the way in which mixed-race college students understand their own identities. Her research shows the way in which individual characteristics like race, gender, and sexuality can interact with microsystems like family and peers, as well as exosystems (financial aid and immigration policies) and macrosystems (cultural expectations, social movements, mores, etc.) to inform the way in which students identify themselves.

Bronfenbrenner's (1979; 1993; 1995) ecological model has also been applied to the study of low-income students and their preparedness for higher education. Arnold, Lu, and Armstrong (2012) analyzed the ecological factors that influence the ways that students' environments shape their readiness for college, finding that coordinated efforts across a student's whole ecosystem would better prepare them for higher education. Another study (Stebbleton, 2011) examines how immigrant college students understand and navigate academic advising. All three of these studies (Arnold, Lu & Armstrong, 2012; Renn, 2003; Stebleton, 2011) demonstrate how Bronfenbrenner's work can be used to understand populations that face conflicting and



competing messages from multiple environments. While Bronfenbrenner's work has been used to analyze K-12 faculty in various contexts (Charland, 2011; Tissington, 2008) and university personnel involved in K-12 teacher training (Dangel, Dooley, Swars, Truscott, Smith & Williams, 2008), it has not yet been used to study the ecologies of higher education faculty members.

While Bronfenbrenner's (1979; 1993; 1995) model helps explain the life roles and exosystem factors that faculty members in higher education face, it also is useful in understanding how their attitudes about teaching and professional development have been formed. For example, the exosystems of their institutions, professional organizations, and academia as a whole often place pressures and demands on faculty members. But they also shape the values and beliefs with which faculty have been indoctrinated. The reward structures of academia are well-known to emphasize research over teaching (Advisory Committee to the National Science Foundation, 1996); this not only dictates how faculty spend their time, but also shapes what they perceive to be important, thus affecting their views of teaching and professional development. In addition, the exosystem principles of academic freedom and shared governance (Birnbaum, 2003) are critical to the relationships faculty have with their institutions; therefore, any form of required professional development would not be perceived as in keeping with faculty members' notions of autonomy.

Ultimately, Bronfenbrenner's (1979; 1993) ecological systems theory shows that faculty members might be experiencing competing systems that can be driving them all in different directions. These environmental interactions affect growth, either promoting or inhibiting development as well as ultimately affecting an individual's perceptions and behaviors. Using Bronfenbrenner's (1979; 1993) ecology model to study faculty in higher education will help

show the competing and conflicting forces that affect how faculty negotiate their personal lives, institutions, and disciplines, which, in turn, can help describe their attitudes and perceptions about teaching and professional development. It will also enable faculty members' lives to be placed in context, thus demonstrating where professional development might fit into their ecologies and meaning making structures. Once practitioners understand the role of professional development in faculty members' lives, they can learn how to encourage and motivate faculty members to participate in professional development activities, which would ultimately help improve teaching and learning on college campuses.

### **Significance of the Study**

The purpose of this study is to learn what faculty at research-intensive institutions think about professional development for teaching. It aims to find out what types of programs they say they would be more likely to attend in the future, including format of program, subject of program, and frequency of program. It also seeks to understand how important these faculty members believe professional development can be to their own pedagogy. This research ultimately will help teaching centers and universities create better professional development programming that could actually entice faculty to attend. If they attend well-conceived programs that meet their needs, it is possible that this will aid in improving classroom teaching overall.

### **Research Design**

The research design is a mixed-methods study measuring faculty attitudes and perceptions of professional development on two college campuses. These institutions are highly-selective, research-intensive universities in the northeastern United States. The mixed-methods approach involves both surveys and semi-structured interviews; this design is appropriate for the

research question because a qualitative approach helps gain a full picture of faculty attitudes and preferences in terms of professional development, while the quantitative measures on the survey enable me to gather data from a representative sample that can be generalized to the population (Fink, 2009). The survey was administered to all full-time faculty at both institutions. The follow-up, semi-structured interviews were conducted only with faculty who had already completed the survey and who volunteered to be interviewed.

The population about which I seek to make generalizations is full-time faculty members in all disciplines who are assistant, associate, or full professors at private, research-intensive universities<sup>1</sup> in the Northeastern United States. Their tenure status varies; they can be tenured, tenure track, or not on the tenure track (what some institutions call “lecturers,” “instructors,” or “professors of the practice”). Generalizations will be made about this population at similar types of institutions nationwide, which is why it is important to survey a range of genders, ranks, ages, and disciplines. Part-time faculty are not the subject of this study because they are generally less involved with the institution and therefore professional development on campus (Stenerson et al., 2010).

The survey was sent to 1,183 faculty members at two institutions. For follow-up interviews with faculty who had previously answered the survey, an ideal sample size was approximately six to twelve faculty members; eleven were interviewed. The survey was a web-based survey using Qualtrics, and faculty members were asked to participate via email.

Questions for both the survey and interview were developed after extensive literature reviews on the topics of professional development, teaching training, and faculty attitudes and opinions. Closed-ended questions asked about faculty members’ past attendance at professional

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<sup>1</sup> Carnegie Classification of Research University/Very High Research Activity (RU/VH) or Research University/High Research Activity (RU/H).

development programs, likelihood of future attendance, and preferred formats and topics for programming. Open-ended survey and interview questions asked about topics such as: faculty members' experiences in attending professional development programs, reasons they might not attend, the manner in which they want to be communicated with about these programs, and their perceived value of professional development in improving their teaching. The survey was piloted twice, and the interview protocol was piloted with five faculty at institutions not in this study. These studies helped inform the final questions for this larger study, ultimately enhancing its validity.

### **Limitations of the Study**

As with any study of this scope, there are limitations. Only faculty at research intensive universities in the Northeast are participants; therefore, it is likely that their responses will not be generalizable to faculty at other types of institutions. It is also possible that the results are geographically influenced and not generalizable to all faculty nationally. Only two institutions are taking part in this study, which might also hinder generalizability.

There is also risk of sample bias. Of those faculty members receiving the email invitation to participate, only those interested in this topic were likely to respond to the survey. Further, only those who answer the survey and find that they have more to say on the topic would have self-selected as interview participants. It will therefore be difficult to make generalizations about all faculty attitudes and preferences if only those who are interested in professional development have provided responses.

To minimize response bias in the survey, I compared surveys of those who responded early versus late in the surveying period. I also examined cases with missing data to see if these respondents were different than those who answer early or fill out all the questions; in both

situations, no major differences were found. Most importantly, I compared the demographics of those who responded to the survey to the overall demographics of the faculty members at each school. That helped ensure that the respondents accurately reflected the populations at each institution. The statistics on these findings will be given in chapter IV.

There was also the possibility of unforeseen difficulties in administering the survey. Piloting the survey twice helped understand the potential problems, such as technical glitches, but these could have varied by institution. In addition, faculty are busy at different times of the year, and therefore, the time when the survey was sent (spring and summer) could have influenced the response rates. This will be discussed further in chapters III and VI. Since the survey was web-based, and there was always the potential that there could be technical problems or issues with computer literacy for some participants. A major risk in web-based surveys is that the email solicitation will be marked as spam or will never be opened by the recipient (Lynn, 2008). I did not hear of any major technical problems with the survey launch, as I did with the first pilot. However, it is impossible to know whether individual participants had trouble accessing the site and then gave up or whether they never received the email at all.

Bias of the researcher is reduced with survey research, but this study also involves interviews and analysis of qualitative data. As a researcher, I value teaching and believe professional development can be worthwhile in improving teaching and learning outcomes. However, I will make every effort to let the data speak for themselves.

### **Overview of the Dissertation**

The study begins with an introduction, problem statement, and theoretical overview in Chapter I. In chapter II, the history of teaching and its place in American higher education will be reviewed, with special attention paid to the role of professional development in colleges and

universities. The literature review chapter will continue with a discussion of the scholarship of teaching and learning, as well as a review of extant studies on professional development and teaching in higher education. This chapter will also examine the body of literature on faculty attitudes and perceptions, specifically focusing on the few studies that discuss faculty attitudes towards professional development. Chapter III will present the methodology and overall research design along with the rationale for using surveys and semi-structured interviews. It will also discuss the sampling techniques, pilot studies that have been conducted, and the methods of data analysis that will be employed. Chapter IV presents the findings from the surveys and the statistical tests that were conducted. Chapter V continues on to present the findings from the interviews. The final chapter, chapter VI, is a summary of the findings and a discussion of their implications for practice. It will also place the findings within a theoretical context and within the relevant bodies of literature before concluding with recommendations for policy and further research.

## **CHAPTER II: History & Literature Review**

This chapter begins with a brief overview of teaching's role in American higher education over the past two centuries. The role of professional development for teaching in American K-12 education and higher education in other countries is discussed as a means of comparison. Then the current context and controversies of teaching and professional development in American higher education are presented.

After the historical overview, the literature about the scholarship of teaching and learning and professional development is reviewed. This review begins with the discussion surrounding teaching in the academy and the movement towards a scholarship of teaching and learning. Next, it will present possible ways of measuring "quality" teaching in higher education. It is also crucial to look at extant empirical studies of faculty teaching, both through faculty's own perceptions and that of their peers and students. Then, to get closer to the issue of teaching training methods, the place of teaching training and professional development programs in the academy along with empirical studies that attempt to measure their effectiveness will be discussed. Lastly, the small body of literature regarding faculty perceptions and attitudes towards various aspects of higher education will be examined in order to understand how faculty view issues like teaching training and professional development.

Some material pertaining to teaching in higher education does not fit within the scope of this literature review. There are many valuable books concerning effective teaching in higher education (Bain, 2004; Brown & Atkins, 1988; Ramsden, 2003) that are aimed at a faculty audience in order to instruct them in best practices. Though these could be useful for faculty and teaching centers in developing professional development programs, they are not helpful for the purpose of this review because this project is not about the content of professional development

programs. It would also be appropriate to look at the literature regarding the weight given to teaching in determining tenure for faculty members. There are two reasons tenure and reward information is not included: first, there are no empirical studies that demonstrate how much teaching is taken into account in tenure decisions, since published material in faculty handbooks generally states that teaching, research, and service are weighted equally. Often this is not the case, and institutions are not likely to be very transparent on the issue. Second, this project follows the literature in accepting the assumption that teaching is already undervalued in higher education (Advisory Committee to the National Science Foundation, 1996; Healey, 2000).

### **Teaching's Role in Higher Education over Time**

Before the mid to late 1800s, not much attention was given to the unique role of teaching in higher education. Colonial colleges mimicked Oxbridge and Bologna models of tutors and faculty as strict disciplinarians who adhered to the recitation method of teaching (Thelin, 2011). While post-Revolution students began to question what they were being taught, often forming extracurricular societies to investigate topics that interested them, there was very little debate over the teaching techniques of faculty or the processes by which they were trained.

In his 1869 presidential inauguration speech at Harvard, C.W. Eliot said, "The actual problem to be solved is not what to teach but how to teach" (Brubacher & Rudy, 1997, p. 212). By this time, American higher education was expanding, and Eliot foresaw a major debate that would continue into the 21<sup>st</sup> century: the role of teaching versus research. At the end of the 19<sup>th</sup> century, American institutions were following the German research university model, and the amount of time spent on teaching was diminishing further. Critics of higher education across the country began to question the proper balance for faculty members in light of the purposes of the



university. George Santayana at Harvard noted that young instructors were more intent on being scholars, only becoming teachers by accident (Brubacher & Rudy, 1997). In 1906, Cornell president Jacob Schurmann commented, “It must be admitted that most university teachers...have chosen their profession not so much from the love of teaching as from the desire to continue the study of their specialty...there are many whose interest in teaching is secondary” (Lucas, 2006, p. 186). At the turn of the century, the university was facing challenges about its very purpose. Was research becoming more important than teaching?

A 1927 study discussed the lack of scholarship in the U.S. versus other European countries, pushing the teaching versus research debate to the forefront once again. One major development to arise at this time was the proposal for new types of doctorates, the Ed.D. and the D.A. (doctor of arts) to prepare students who planned to go into teaching (Brubacher & Rudy, 1997). However, this proposal did not solve the problem, as most people in academia still saw the Ph.D. as more prestigious. The proposal was put on hold until the 1960s when the debate was renewed.

During WWII, discussions about the evaluation of teaching were added to the perennial debate of research versus teaching. Edmund Day, president of Cornell, said it “was up to the faculty rather than the administration to redress this balance, for it was the faculty that resented measures to evaluate the efficiency of teaching in order to put it on par with research” (Brubacher & Rudy, 1997, p. 212). This begins to hint at the issues of faculty autonomy and academic freedom in higher education, notions more firmly solidified by the American Association of University Professors’ 1940 Statement of Principles (AAUP, 1940). Historically, faculty have been granted a degree of freedom in their classrooms; the evaluation of teaching in this time period was met with resistance because faculty had traditionally been treated as experts.

There is very little evidence of teaching evaluations being considered before the 1940s, and even this consideration was short-lived. As faculty resisted evaluations of their teaching, efforts made to scrutinize what they were doing in the classroom decreased, effectively putting the discussion to rest for the next few years.

Post WWII, American universities' focus on research reached unprecedented heights. With federal funding for research, the space race, and the Cold War, research, especially of a scientific nature, was of utmost importance in higher education. Teaching lost significance, and both teaching time and contact with undergraduate students decreased (Kerr, 2001). Because of new federal funding structures and incentives, the teaching university of old was changing into the research university almost overnight "in the sense that many in the faculty devoted their primary attention to their research and not to their teaching. Teaching loads dropped by one-half or more" (Kerr, 2001, p. 203). Faculty were now sought after for their research and grant-earning abilities instead of their teaching.

As was the case in many aspects of American culture, the 1960s pushed against what had become the status quo in academia. Because graduate education was on the rise and faculty were teaching less, more undergraduates were learning from teaching assistants (Brubacher & Rudy, 1997). Many critics brought to light the poor skills of graduate TAs and called for teaching training programs for students in graduate school (Advisory Committee to the National Science Foundation, 1996). Some proponents advocated for more careful selection of teachers before training and placement, while others suggested that a department member with recognized teaching mastery should hold meetings, lectures, and sessions to train graduate students in pedagogy. Once again, the proposition of two different types of Ph.D.s—one track for research, the other for teaching—was set forth. However, opponents of the dual model firmly believed

that there should be a strong teaching component in the regular Ph.D. program, no matter what the recipient intended to do with the degree. All programs, they argued, should incorporate both the theoretical study of education and a supervised teaching practicum (Brubacher & Rudy, 1997). The Carnegie Corporation also took up this issue in a report (Carnegie Corporation, 1960). A highly influential body in higher education, it suggested that all doctoral students should be required to have some actual teaching experience, not less than half time for half a year. The report also proposed the design of a new two-year intermediate doctorate for college teachers, which did not catch on (Brubacher & Rudy, 1997). Though the integration of teaching training for graduate students has been recognized as a continual issue since the 1960s, very little has been done over the past few decades to formalize any system to address it.

The student revolts of the 1960s were also related to the place of teaching on campus. Clark Kerr (2001) noted that the “subtle discounting of the teaching process has been aided and abetted” (Kerr, 2001, p. 48) by the proliferation of research in universities, and he tied this back to student protests he witnessed at Berkeley while president of the UC system. Along with other issues, he felt that the revolts were about “student neglect by faculty due to concentration on research” (Kerr, 2001, p. 204). The feeling of neglect was not confined to Berkeley alone: Students across the country began to notice the absence of professors in their classrooms.

In 1973, the U.S. Council of Graduate Schools published a report demanding changes in graduate education with specific regard to teaching. It also advocated for teaching ability and community service to be given equal weight with research in the reward system of academe (Brubacher & Rudy, 1997). This was one of the first times that the decline of teaching was specifically linked to academia’s organizational structure. Tenure processes often focused mainly on a faculty member’s publishing and research record instead of teaching. The U.S.

Council of Graduate Schools recognized that it was necessary to put teaching on par with research from a reward standpoint in order to begin the long process of changing the culture of academia. Advocates of the Scholarship of Teaching and Learning (SoTL) movement would return to this argument in the 1990s.

In the 1980s, emphasis again shifted back to professor as expert. Many critics reacted to the tumultuous sixties and seventies with a call to return to the former days of higher education. Alan Bloom's controversial *Closing of the American Mind* (1987) highlighted the culture wars he felt were drastically affecting the quality of higher education and attacked what he saw as a liberal professoriate. Bloom (1987) and others were against the "democratization of the university" and instead longed for the time when college was reserved for an elite subsection of students (Levine, 1996). Bloom's work, among others from the late eighties and early nineties, demonstrated a mistrust of contemporary higher education and proposed a backward-looking model to rectify what they saw as a student-centered learning environment. In their view, teachers, not students, should drive the college experience, which was a direct contradiction of arguments from the seventies and the nineties.

In the 1990s, debates arose over the quality of undergraduate education: what were students actually learning? This was partly a response to numerous reports of grade inflation. Organizations and institutions themselves began to scrutinize teaching and curricula, re-evaluating the college experience. Students did not want to learn facts via memorization; most felt that the college experience should be an intellectual pursuit that they should play an active role in shaping for themselves. However, as enrollments increased, large classes were continually taught by inexperienced graduate student TAs or faculty reluctant to leave their research, much like during the college expansion of the 1950s and 60s. Students called for

smaller seminars to converse with faculty and be intellectually challenged, but critics noted they would be unsuccessful “unless or until undergraduate education was no longer neglected or devalued as an enterprise strictly ancillary to professional and graduate training” (Lucas, 2006, p. 313). During the 90s, the argument was that undergraduate learning should again be at the forefront of the college experience, but this raised more questions than answers. How would priorities be shifted in higher education? Once again, people argued that the professorial reward system needed to be altered. This brought the focus brought back to academic culture, faculty, and what they were teaching students.

Lee Shulman proposed a major reform for teaching in a 1987 article entitled, “Knowledge and Teaching: Foundations of the New Reform” (Shulman, 1987). Though he did not specifically focus on teaching in higher education, his argument had broad implications for all areas of education. Shulman, who taught at Stanford and later became head of the Carnegie Foundation for the Advancement of Teaching, argued that teaching preparation and reflection, with higher standards and a greater professionalization of the field of teaching, would result in improved teaching methods. This article helped set the stage for a renewed focus on teaching, as did Ernest Boyer’s 1990 book *Scholarship Reconsidered: Priorities of the Professoriate*. Boyer aimed to address the inequality in teaching versus research in the academy, and many of his arguments helped fuel the movement towards a scholarly approach to teaching. These arguments were carried forth through the 1990s by scholars like Bass (1998) and Healey (2000) who were proponents of the Scholarship of Teaching and Learning (SoTL) movement, which will be discussed in more detail later in this chapter.

As a result of the SoTL movement and international emphasis on teaching and learning, some changes have taken place in higher education. Organizations like the National Association

for Integration of Research, Teaching, and Learning (NAIRTL) and the International Society for the Scholarship of Teaching and Learning (ISSOTL) have been formed. These groups hold conferences and publish newsletters and articles to draw attention to the scholarship of teaching and foster collaboration across various disciplines and cultures. In addition, the *International Journal for the Scholarship of Teaching & Learning* began in 2006. A peer-reviewed electronic journal, it is published twice annually by the Center for Excellence in Teaching at Georgia Southern University.

Besides journals and conferences, the discussion about teaching excellence has encouraged institutions to more closely examine the way in which they foster and regard teaching development on their campuses. Institutions have started mandatory post-tenure review and peer-review processes for both tenure track and tenured faculty members (Altbach, 2011). Many colleges and universities have developed centers for teaching that hold workshops, tutorials, learning communities, and other professional development programs (Van Note Chism, Lees & Evenbeck, 2002). In the 1990s, professional development schools (PDSs) were instituted on some campuses to reform teacher education for primary, secondary, and higher education faculty (Bullough et al., 1997). Despite all these initiatives, the status of teaching in academia has remained a hotly debated issue, and little has changed since the German research university model infiltrated American higher education in the 19<sup>th</sup> century. However, new forces and characteristics of education in the 21<sup>st</sup> century provide hope that we are heading in the right direction.

### **Teaching in Other Contexts**

Historically, teaching training has existed in the United States mainly for primary and secondary teachers. Normal schools and teachers' colleges of the 19<sup>th</sup> and 20<sup>th</sup> centuries were

created primarily to train K-12 teachers (Thelin, 2011), while a Ph.D. in one's subject area has traditionally been the pathway to teaching at the college level. Masters degrees in education, commonly pursued by K-12 educators, usually feature a variety of pedagogical courses as opposed to training in one's subject area (National Commission on Excellence in Education, 1983), while college faculty receive discipline-based education with little to no pedagogical training. In addition, professional development for primary and secondary teachers has been robust since the mid-1900s and is required by most public school districts. In higher education, professional development has only emerged in a significant way on campuses since the turn of the 21<sup>st</sup> century.

The United States lags behind many of its peers in the area of professional development for college faculty. Around the year 2000, higher education teaching training became mandatory in the United Kingdom and Sri Lanka (Gibbs & Coffey, 2004). At the same time, other countries, including Finland, Ireland, and Australia, were considering such a mandate for their higher education teachers, and it was already an established policy in Norway (Trowler & Bamber, 2005). The major effect of these directives was that teaching training programs, centers, and evaluations were pushed to the forefront of higher education institutions in these countries, and many scholars were able to conduct empirical studies on the effectiveness of these programs (Coffey & Gibbs, 2000; 2001; 2004, for example). The U.S. has not yet reached this stage.

### **Current Contexts and Controversies of American Higher Education**

Other contemporary factors are influencing the renewed focus on teaching in the U.S. (even though it is not at the same heightened level as some other countries). Financial cutbacks in state and federal appropriations have forced faculty hiring practices to change. Tenure quotas

were imposed at many schools, leading to an increased use of part-time and adjunct faculty. More than half of all U.S. faculty are now non-tenure track; as recently as the early nineties, that number was closer to 20% (Altbach, 2011). As tenure declined in scope, critics of higher education began questioning whether it is an outdated policy that should be abolished. They argue that people are promoted and tenured without clear reason, professors cannot be easily replaced or fired, and the system “bred sloth among those with tenure” (Altbach, 2011, p. 241). Tenure raises issues of teaching evaluations and reviews, about which faculty are often critical. Though tenure was meant to protect academic freedom, and faculty are well aware of their traditional freedom and autonomy, tenure often has the unintended effect of protecting those who are poor teachers. Yet with the rising accountability in higher education, especially since the Spellings Commission of 2005, it is difficult to find a balance between faculty autonomy and institutional accountability. Institutions are struggling to find ways to evaluate faculty while still protecting their freedom.

On the other hand, many critics, including the AAUP, assert that the proliferation of adjunct faculty can lead to lower educational quality (Bullough et al., 1997). Because adjunct faculty are not generally subject to the same review processes as tenure-track and tenured faculty, it is even more difficult for institutions to measure their classroom teaching. To respond to both groups of faculty members, many institutions have started peer-review processes for teaching. To respond to the critiques about tenure-track and tenured faculty members, as well as to address financial strains on their schools, some institutions have raised the requirements for tenure (Altbach, 2011).

Lastly, institutions have increased programs for professional development of teaching in order to allow all types of faculty members a means for improving their teaching abilities.



Professional development programs for teaching involve workshops, one-on-one tutorials, training sessions, feedback and evaluations, and learning communities, among others. Some institutions have begun to require professional development for their faculty members, while others require it at the school or department level (Van Note Chism, Lees & Evenbeck, 2002). However, the main issue with professional development on other campuses is the lack of faculty participation. Because of the notions of faculty autonomy and shared governance (Birnbaum, 2003), institutions are hesitant to require faculty members to attend these programs. A delicate balance must be struck to encourage faculty members to go without making it seem as if the administration is forcing it upon them.

Many scholars in the field of education believe that professional development for teaching would benefit all higher education faculty and should be required to some extent (Gibbs & Coffey, 2000; 2004; Kucsera & Svinicki, 2010; Van Note Chism & Szabo, 1998). The greatest resistance comes from faculty members who either see it as infringing upon the traditional culture of academia (Buchanan, 2011; Akerlind, 2011) or believe that it takes away from their true job, which is research (Karagiannis, 2009). Those who believe professional development and teaching reviews are anti-academia believe that teaching is a craft that cannot be measured in a numeric way. For instance, Karagiannis (2009), a scientist, noted that she was hired to do research first, and teach second. She presented the proposal that there should be two tracks for faculty: one for research and one for teaching. This is reminiscent of the debates over dual doctoral tracks and teaching preparation from the early to mid-20<sup>th</sup> century (Chait, 1990).

Therefore, as much as higher education has changed, some debates have stayed the same. The balance of teaching versus research for faculty members is a perennial issue. However, it seems as if the contexts of the 21<sup>st</sup> century, such as increased tuitions, decreased appropriations,

a changing academic job market, and rising accountability, have combined to renew focus on teaching. These factors show that there should be more emphasis on teaching, teaching training in graduate school, and teaching professional development for faculty members. Because the higher education market has changed, institutions are forced to “think more directly about student needs, using a model designed to focus attention on the customer” (Altbach, 2011, p. 239).

Over the past two centuries, the reward system in academia has produced an imbalance, where research is valued more than teaching (Advisory Committee to the National Science Foundation, 1996). Faculty are often sent mixed messages about where to focus their time. The cyclical debate from the 1800s onwards shows that the role of teaching in higher education has always been a controversial issue; the late 1800s saw the rise of research over teaching, which resurfaced again post-WWII. The early 20<sup>th</sup> century, the revolutionary 1960s, and the culture wars of the 1990s gave students space to critique the instruction delivered by faculty members. From the 1990s to the early 21<sup>st</sup> century, the discussion of teaching in higher education has grown in importance, with many nations now requiring professional development and teaching training for faculty members. The last two decades have given rise to professional development initiatives, which may be a way of helping faculty pay more attention to their teaching.

### **Literature Review: State of Teaching in Higher Education**

During the late 20<sup>th</sup> and the early 21<sup>st</sup> centuries, scholarly emphasis on the development of teaching began to grow both in America and overseas. In the United Kingdom in particular, this movement became known as the “Scholarship of Teaching and Learning” (SoTL). Most of the literature surrounding this phenomenon consists of thought pieces (Boshier & Huang, 2008;

Elton, 2001; Healey, 2000), though a few empirical studies were conducted (Coffey & Gibbs, 2000; 2001; 2004). Besides SoTL, other arguments have been made to raise the status of teaching in higher education by reframing the way in which it is discussed and viewed by both administrators and faculty members (Kucsera & Svinicki, 2010; Shulman, 1987; Van Note Chism et al., 2002; Van Note Chism & Szabo, 1998; Sorcinelli & Davis, 1996). Though there has been some debate over the issue, most of the literature ultimately concludes that the state of teaching in universities is poor. In order to meet increased demands for accountability (Altbach, 2011; Schuster & Finkelstein, 2007), institutions will have to focus on improving the teaching of faculty members.

As mentioned above, Lee Shulman (1987) and Ernest Boyer (1990) helped fuel the movement to SoTL. Building off their work, Randy Bass wrote “The Scholarship of Teaching: What’s the Problem?” (Bass, 1998). A faculty member at Georgetown, Bass worked with the Carnegie Foundation for the Advancement of Teaching throughout the 1990s to investigate the scholarship of teaching, which he defines as, “not merely the existence of a scholarly component in teaching, but a particular kind of activity, in which faculty engage, separate from the act of teaching, that can be considered scholarship itself” (Bass, 1998, p. 2). Bass argues that teaching needs to be redefined in the academy and that good teaching should be an object of investigation in and of itself. He proposes his own theory of an “inverted pyramid,” which guides how courses can be constructed in order to focus on student learning outcomes. Ultimately, he asserts, faculty should reflect on their own course design and teaching “from the perspective of learning” (Bass, 1998, p. 7), which is a deliberate task involving the incorporation of qualitative and quantitative data, assessment, evaluations, and peer review. Bass and the Carnegie Foundation, along with former Carnegie president Lee Shulman, hoped that by making their inquiries and

debate public, opening them up to critical review and evaluation, and allowing for exchange and use by other scholars, the academic community would eventually begin to reframe teaching as scholarship.

Healey (2000) wrote a critical piece arguing for the development of teaching in higher education; most notably, he asserts that the scholarship of teaching should be just as important as scholarship in a faculty member's own discipline, and that the complementary nature of research and teaching can be developed further in order to enhance this linkage. He believes that, by raising the standards for teaching and linking it to research, faculty members will become more engaged with pedagogy by means of their own disciplinary research. He suggests a few ways for higher education to facilitate this process, and claims that "if the scholarship of teaching is to match that of research there needs to be a comparability of rigor, standards and esteem...the key to developing a scholarly approach is to link the process explicitly to the disciplines" (Healey, 2000, p. 170). This argument is one of the main points behind the SoTL movement: Faculty should treat their own teaching development with the same gravity they use for disciplinary research, and universities should facilitate this by framing research and teaching as equals on campus. Healey and many other authors in this literature review (e.g. Gow, Kember, Norton) helped create and remain involved in organizations like the National Association for Integration of Research, Teaching, and Learning and the International Society for the Scholarship of Teaching and Learning. Again, most of these organizations, conferences, and newsletters are based in the United Kingdom, where the SoTL movement is the strongest. They publish electronic newsletters with short opinion pieces that give quick, up-to-date glimpses into the latest developments in the field.

However, Healey's piece is so discipline-focused that it often loses some of its persuasiveness. He is writing as a geographer in the United Kingdom and uses examples of conferences and journals specifically concerned with teaching in geography. Many of his suggestions therefore may not be applicable across disciplines, types of institutions, and countries. He also does not attempt to make suggestions to university administrators; it seems as if his main audience is faculty themselves. Though it is important to have a voice in the literature explaining the importance of pedagogy to faculty and suggesting how they can use their own disciplines as a link to the scholarship of teaching, a reframing of the way in which teaching is perceived in higher education cannot be accomplished by faculty alone.

Reframing the way in which teaching is discussed is the topic of another set of literature (Elton, 2001; Loewenberg Ball & Forzani, 2011; Van Note Chism et al., 2002). The majority of this literature comes from K-12 education, but some basic principles are applicable to higher education. Loewenberg Ball and Forzani (2011), among others, argue that policymakers do not focus on teaching and that there is a lack of coherence in the way in which teaching is discussed in different spheres. The authors note that teachers need specific tools in order to reach students, yet there is no commonly agreed upon set of terms for these tools. As a result, K-12 teachers are being trained to teach in different ways. Though this particular piece is K-12 focused, the concepts can easily be applied to higher education. In fact, the situation is even worse in higher education, where faculty members are typically never trained to teach, so it is more difficult to broach the topic of a common core for learning to teach. A common language regarding what is necessary to be successful in the classroom could help policymakers, administrators, and faculty members align their disparate visions of what it means to teach in higher education.

Some scholars have attempted to push the SoTL movement through to subsections of higher education, perhaps in order to have a greater impact on a smaller area. Spelt, Biemans, Tobi and Luning (2009) of the Netherlands undertook a systematic literature review to examine the scholarship of teaching and learning in interdisciplinary higher education. They ultimately concluded that there is only limited research regarding interdisciplinary teaching, and what literature they did find concentrated mostly on students as opposed to faculty. For example, the authors list broad sub-skills necessary for students to be successful interdisciplinary learners, but they do not provide any solid suggestions as to how faculty can help their students achieve these skills. Benson and Brack (2009) conducted a mini-case study in Australia on yet another subsection of higher education, e-teaching and learning. Their research question, “can ideas about e-learning add to current understandings about the nature of the scholarship of teaching and learning?” leads to the suggestion that e-learning can help involve students in their own learning instead of leaving the teaching to the faculty alone. E-learning can move the emphasis to social engagement and learner control, which the authors see as the future of higher education. Though their study opens up new conceptions of teaching that are not traditionally involved in the SoTL movement, the authors imply that students can utilize e-learning in order to take some control away from faculty members, which is not necessarily in keeping with the theory behind SoTL. While enhancing teaching skills can certainly include e-teaching and increasing student involvement in their own learning, the proximate purpose of training faculty would be to augment awareness of pedagogy and how students learn.

Therefore, most arguments center upon the notion of faculty growth and development. As the focus on SoTL grew throughout the 1990s and early 2000s, professional development programs also increased. Some scholars began to take a more holistic interpretation of faculty

growth, which would include work-life balance, training as researchers as well as teachers, and involvement in the broader community. O'Meara, Terosky, and Neumann (2008) wrote an entire volume devoted to this topic, arguing for an explicit focus on faculty growth and challenging those in higher education to "identify ways to foster, in faculty members, the desire and will to craft themselves as teachers, researchers, and partners in service and community engagement" (O'Meara, Terosky & Neumann, 2008, p. 19). This focus on professional development for faculty members will ultimately help improve the state of teaching in higher education. The next section of this paper will discuss literature that attempts to categorize and define good teaching, before moving on to present various types of teaching training and professional development that currently exist for faculty members to improve their teaching.

### **How Do We Measure Teaching?**

How do we know what good teaching is, if that is what we are trying to promote? Does it mean the students enjoyed the class, or that they retained information? Does it mean they are prepared for more advanced learning in the subject, or that they prepared themselves for future careers? Does it encompass all of the above? The possible definitions could even vary by discipline and purpose of the class. Overall, the literature shows there is no agreed-upon definition of good teaching, nor are there well-established means for measuring it (Benton & Cashin, 2012; Clayson, 2009). While attempts have been made to define effective teaching, is important to keep this quagmire in mind as the literature is reviewed below.

Unsurprisingly, most of the literature around this topic consists of thought pieces (Elton, 2001; Fitzmaurice, 2010) mostly written by faculty members who argue that teaching is currently being reduced to a set of skills, when it should be conceived of as a complex, dynamic practice.

They believe that teaching training, at least in the UK where it is mandatory, forces teaching to be seen as a vocation that can be learned instead of an innate talent (Elton, 2001). Much of the literature agrees with the premise of the SoTL movement, yet the authors argue for a broader, more holistic conception of teaching training that focuses less on concrete skills and more on the whole career.

Another way of attempting to define good teaching is by looking at what award-winning faculty members have done well. This literature consists of a mix of thought pieces and empirical studies (Morris & Usher, 2011; Sorcinelli & Davis, 1996), and unlike most of the other literature on the scholarship of teaching, these examine faculty members at American institutions. There is a dearth of literature on reward structures for faculty teaching, perhaps because even if institutions are offering rewards, the process is not being studied in a scholarly way. It is also interesting that the articles focusing on rewards and honoring exemplary teachers are American; this could be indicative of the way in which Americans view the purpose of teaching training as compared to other countries.

The literature does not come to a common solution for how to define quality teaching. This makes it difficult for future studies to proceed, and perhaps it explains why so few researchers have attempted to study this topic. Some authors (Sorcinelli & Davis, 1996) offer concrete advice on how to improve reward programs at institutions, and they suggest other incentives that universities could offer to maintain good teaching such as grants, publicity for exemplary teachers, and awards. Others (Chang et al., 2011; Morris & Usher, 2011) focus on self-efficacy as the ultimate goal of improving teaching. Instead of examining student outcomes, they note that faculty perceptions of self-efficacy improve when one has achieved tenure or been honored with awards. However, a flaw in this type of research is that faculty's thoughts on their



own efficacy in the classroom are not all that useful in understanding how well they actually teach.

Ultimately, the literature's focus on rewards and honors undermines the purpose of teaching development programs. Rewards are short-term solutions that may entice faculty to improve their teaching, but are likely an unsustainable model. Professional development, staying current in pedagogy, and putting emphasis on learning outcomes should be the focus of the scholarship of teaching and learning, not tenure and awards. Tenure and awards do not put the student's learning outcomes first.

As with any movement in higher education, there have been pushbacks. Most of these thought pieces come from faculty members (Boshier & Huang, 2008; Buchanan, 2011; Karagiannis, 2009) who argue that the new emphasis on the scholarship of teaching is difficult to maintain and inherently flawed. Some authors criticize the SoTL movement for not putting enough emphasis on student learning, while others point out the conflicting demands between research and teaching. Karagiannis (2009) even goes so far as to propose that teaching responsibilities should be allocated to junior staff while senior faculty members would exclusively conduct research. This article only fuels the public's complaints about faculty members' goals in higher education. If faculty members only want to conduct research, they should become researchers; shirking teaching responsibilities is not a solution to the problem. Gibbs (2005) has a similar but less controversial suggestion: weighting teaching and research differently depending on the individual faculty member's strengths. Again, this scenario presupposes that there are inherent distinctions between research and teaching that make it difficult for them to coexist. Ultimately, at least in most American institutions, faculty members

are responsible for both teaching and research, and this dual role seems unlikely to change anytime soon.

However, some faculty members (Akerlind, 2011; Buchanan, 2011) agree that teaching quality needs to be enhanced, but insist that it should not be measured quantitatively. Instead of helping to improve teaching, using student surveys and other numeric indicators can degrade, demean, and decontextualize the teaching profession because it does not take other factors into account. Though Buchanan (2011) presents no alternative solutions, he raises the important point that qualitative methods may be a better approach to evaluating teaching. Akerlind (2011) further notes that teacher development needs to be part of a holistic view of overall academic development; separating teaching and research treats them as different entities, when in fact, teaching is part of what it means to be an academic. Both authors echo Healey (2000) and Elton (2001) by promoting the ideal of teaching as a part of a complex interrelationship of duties for which all academics are responsible. These themes are picked up in the literature surrounding faculty development evaluation, which will be discussed in more depth below.

**Attempts to measure teaching.** Besides the aforementioned examinations of award-winning teachers, other empirical studies have been conducted in an attempt to measure how faculty members teach. In general, these all come from outside the U.S., and each focuses on a different population. Methodologies vary, yet no one study is able to capture the interests of all stakeholders involved in evaluating teaching. Contrary to Buchanan's (2011) point, almost all of these studies are quantitative, which is a method that is unlikely to capture the nuances of high caliber teaching.

The broadest category of empirical studies is based on self-efficacy theory, which stems from Bandura's (1997) social cognitive theory. These studies (Chang et al., 2011; Cook, 1998;

Morris & Usher, 2011) use surveys and interviews of faculty members to determine how effective they believe they are in the classroom. The main problem with this method is that it does not show how effective students feel the faculty member is; faculty can believe they are extremely strong teachers, yet this does not explain how effective their students or peers believe them to be. Chang et al. (2011) evaluated faculty members' perceptions of their own teaching and broke their questionnaire down by categories such as course design, class management, learning assessment, technology use, and instructional strategy. In analyzing results, the authors examined faculty gender, years of teaching experience, type of institution, and discipline. Most notably, they asked whether the faculty had gone through any teaching training; when analyzing results, they found that training did not significantly improve faculty perceptions of their own teaching. This is the only study involving teaching training that had this result. However, this study took place in Taiwan, and the results might vary by country.

Two American self-efficacy studies contradict each other and do not focus on the use of teaching training. Cook (1998) analyzed organizational characteristics in an institution and the influence they had on self-efficacy of faculty; she found that as faculty advanced in rank, feelings of self-efficacy declined. Morris and Usher's (2011) study on award-winning professors' self-efficacy found the opposite: When faculty achieved tenure, feelings of self-efficacy increased. The fact that self-efficacy studies on faculty all present different results is indicative of the fact that not enough research has been done in this area, or that the methodology used is flawed.

Other attempts at measuring teaching in higher education utilize interviews, surveys, and mixed methods approaches (Coffey & Gibbs, 2000; 2001; Gow & Kember, 1993; Norton, Richardson, Hartley, Newstead & Mayes, 2005). Though some studies interview faculty

members, none is entirely qualitative. Gow and Kember (1993) use both semi-structured interviews and questionnaires for faculty members, then compare these scores to a previous longitudinal study of student learning scores in order to see if there is a correlation between faculty members' intentions and student perceptions. The Gow and Kember (1993) study is the most in-depth study that exists, and it is the only one to examine both faculty and students. The discussion of students' perceptions of faculty efficacy is almost entirely absent from the literature with the exception of Coffey and Gibbs (2000, 2001). Though Gow and Kember have sound methodology, they use no theory as a foundation for their study, and it took place at a polytechnic institute in Hong Kong. Just as with the Chang et al. (2011) study, it is difficult to know whether these results would be the same in other countries.

Another common trend with empirical studies thus far is that most consider the intentions and beliefs of faculty members in teaching. As with the self-efficacy studies (Chang et al., 2011; Cook, 1998; Morris & Usher, 2011), Norton et al. (2005) are only concerned with faculty perceptions and thoughts on their own teaching effectiveness, as opposed to how others view the faculty. Norton et al. were not focused on teaching outcomes or student learning, but rather on the conceptions of teaching as they differ by discipline. Though they found that conceptions and intentions varied across disciplines, levels of teaching experience, and institutions, they did not analyze the data further or attempt to explain why these differences might exist. This is an area where linking beliefs about teaching back to what faculty members learned in their graduate programs could have proven useful; yet very few empirical studies on teaching effectiveness even touch upon doctoral preparation. This limitation will be discussed more in depth below.

The last type of literature that attempts to measure teaching examines students' perceptions of teaching efficacy as opposed to faculty perceptions of their own work. The

leaders in this field are Coffey and Gibbs, who study teaching development in the United Kingdom. They have authored numerous articles together and separately, and they were some of the first researchers to attempt to measure whether academics could benefit from teaching training. Coffey and Gibbs are the only researchers to use the Student Evaluation of Educational Quality (SEEQ) survey in measuring student evaluations of professors who had participated in teaching training programs. The survey asks students questions about how much they learned, how well organized the course was, and how enthusiastic the instructor was. The earliest work from Coffey and Gibbs (2000; 2001) attempts to prove the usefulness of the SEEQ for this type of study; as the survey was a pre-existing, American tool, they wanted to be sure it would translate to the UK. They argue that the debate over teaching training arose without evidence for the impact of training, so they undertook a multi-stage study regarding initial teaching training of faculty in the UK. Their follow-up studies will be detailed below and are fundamental to the argument for professional development for teaching.

### **Teaching Training**

The next category of literature involves teaching training, which lies at the crux of the issue of teaching development for faculty. There are two stages to teaching training: any initial training faculty members may or may not receive while enrolled in their doctoral studies, and the ongoing faculty development they could participate in once they begin teaching at the college level.

#### **Initial Forces**

The literature on initial teaching training while in graduate school is scarce. This might support the widespread belief that graduate school does not prepare doctoral students well for

future careers in teaching. Some thought pieces (Altbach, 2011; Austin, 1992) discuss the lack of focus on teaching while in graduate school, though the majority of these articles do not provide any hard evidence to support their claims. Scholarship into doctoral preparation is a growing area in the United States (Austin & McDaniels, 2006), so it is likely there will be future empirical studies that may help illustrate this argument.

Very few empirical studies exist on teaching training in graduate school, but one study on doctoral preparation addresses the issue. This Australian study conducted by Brew et al. (2011) investigates the extent to which doctoral studies prepared academics for their future roles as faculty members. One of the categories measured was the duty of teaching undergraduate students; a quarter of all faculty members studied answered that graduate school did not prepare them to teach at all, while almost 30 percent said it prepared them only “a little” (Brew et al., 2011). The authors found that this preparation varies by both discipline and institution, with science and engineering faculty members feeling more prepared to teach undergraduates than those in other disciplines. Overall, however, the study concluded that doctoral work “may avoid developing the key skills that academics need” (Brew et al., 2011, p. 51). The authors argue that these findings can be used to change the value placed on teaching within the institutional culture, because the current climate is not conducive to encouraging faculty members to attend professional development programs. In the area of faculty teaching development, the study found that women and lecturers participated in development opportunities more often than men or full professors. This key investigation into the teaching culture surrounding both institutions and disciplines directly relates to the place of teaching training in higher education. The authors have shown that faculty members’ perceptions of the value of teaching are set as early as graduate school, meaning that any work done to improve the way teaching is viewed in the

academy has to start at the ground level. Once they have already secured positions, faculty are less likely to want to attend professional development activities. Therefore, it is important that this emphasis on teaching and the training process begin while academics are still in their doctoral programs. As with many of the aforementioned empirical studies on teaching, the findings may not be entirely applicable to American faculty members, and unfortunately, the authors use little to no theory to ground their work. However, their findings support similar arguments made by Austin and McDaniels (2006) in their thought piece that sets forth a conceptual framework for helping support the professional development of doctoral students. These authors note that graduate education plays an important role in socializing and preparing students for their future responsibilities in both scholarship and teaching.

Other studies (McLean & Bullard, 2000; Nicholls, 2005) have attempted to measure young academics' conceptions of teaching in higher education by using theories of self-identity and Kelly's (1955) Personal Construct theory. These types of studies, unlike Brew et al., are more focused on new faculty members and the ways in which they view their own roles within their departments and institutions. By analyzing teaching portfolios (McLean & Bullard, 2000) and surveys of new lecturers in the UK (Nicholls, 2005), both studies found that these faculty members had student-focused conceptions of teaching, were self-critical, and considered themselves expert in their fields, but felt that they were novice teachers. Though they were self-reflective, they often did not integrate teaching theory or skills into their classroom performance. Most notably, the authors discuss the bi-polar and dichotomous nature of being a faculty member, where faculty have dual roles as teachers and researchers. Since many subjects referenced the fact that they held preconceived notions of their roles as faculty, the authors link this back to the initial socialization into academia that faculty receive while in graduate school.

This conclusion is similar to the Brew et al. (2011) study that found the value of teaching differs by institution and discipline as well as Austin and McDaniels' (2006) arguments for the importance of graduate education. These findings can be problematic for higher education in general because students experience different levels of teaching in different disciplines and schools. Nicholls' (2005) study of new lecturers is especially timely with the rise of lecturer positions both abroad and in the US, which some scholars see as a change that can be detrimental to academia as a whole (Altbach, 2003; Schuster & Finkelstein, 2007) and can decrease learning outcomes for students. Taken together, these studies show that not all faculty members view teaching the same way, and very few are actually trained to teach while in graduate school. Even once they have started teaching at an institution, new faculty members often do not feel prepared to teach and consider themselves novices. Though they are able to reflect on what they are doing in the classroom, very few of them incorporate this self-reflection or any teaching theory they may have learned back into their daily routine. Since faculty members do not learn to teach in graduate school or when they are new to teaching, when might professional development occur? The next section will discuss evaluations of teacher training programs for more established faculty members.

### **Programs for Faculty Members**

Numerous institutions of higher education, especially those in the UK, run professional development programs to work with faculty members to improve their teaching skills. Some of these programs have been evaluated by researchers (Austin, 1992; Gibbs & Coffey, 2000; 2004) to determine their intentions and effectiveness, while other scholars (Fink, 2013; Kucsera & Svinicki, 2010; Stes, Min-Leliveld, Gijbels & Van Petegem, 2009; Van Note Chism &



Evenbeck, 2002; Van Note Chism & Szabo, 1998) present thought pieces and literature reviews on the ways in which these programs can and should be evaluated and assessed. Overall, the authors are almost unanimous in agreeing that teaching training programs can help faculty improve their teaching and ultimately increase student learning outcomes. All authors argue for institutional change in order to raise the level of value placed on teaching in the academy.

As mentioned previously, Coffey and Gibbs in the UK lead the field in studying these types of programs. Their study (Gibbs & Coffey, 2004) used the SEEQ to measure the impact of a training program on a set of university faculty at 22 universities in eight different countries. By comparing the SEEQ scores for the faculty who had undergone the training program and the SEEQ scores of a separate control group that had not participated in training, the authors concluded that teaching training resulted in a better classroom experience and increased learning outcomes for the students. Besides the SEEQ, Coffey and Gibbs also used questionnaires for the faculty members to assess their experiences; the researchers were interested in how the training program affected faculty members' approaches to teaching and student learning, which was not something that could have been measured by the students' questionnaires. Students and faculty completed these surveys both at the beginning of the training program and again one year later. The study found that positive changes took place in the group that received training, yet perhaps more importantly, they found that sometimes negative changes took place in the untrained control group. This could have serious implications for higher education since some members of the untrained group saw their teaching *deteriorate* over the course of one year, implying that teachers who may have been at an institution for many years could get worse at teaching annually. Instead of faculty members improving their skills through years of experience, Coffey

and Gibbs showed that elapsed time could have the reverse effect. This is yet another argument for the importance of implementing professional development programs for faculty.

The strength of Coffey and Gibbs' 2004 study was that it evaluated both the students and their corresponding faculty members. This approach contrasts with other studies (Chang et al., 2011; Cook, 1998; Embuena & Hernandez Amoros, 2012; Gow & Kember, 1993; Morris & Usher, 2011; Norton et al., 2005) that measured only the faculty members' own perceptions of their teaching skills or their perceptions about the professional development program itself. While Coffey and Gibbs are the first to include both students and faculty, they do not correlate the scores given by one class of students and the survey answers given by the corresponding faculty member. This technique might be a better way of evaluating the direct relationship between training programs and the resulting experiences for the students and faculty members.

Just as very few studies focus on the students' perspective of faculty teaching training, even fewer exist that evaluate the teacher trainers. Coffey and Gibbs conducted one earlier study (2000) on the views of teacher trainers regarding their intentions and what the programs aim to achieve. At the time, the UK had an accreditation scheme with a common set of outcomes, yet the researchers found that trainers using the same framework often appeared to have different goals and views. Their surveys, administered at eleven different institutions, asked about the rationale for the training program, what it was designed to achieve, and what the trainers believed was the intended impact. Though the answers varied greatly, the most common goal was developing skills and competencies as a teacher, followed by promoting reflective teaching. The trainers discussed their hopes to develop a language of teaching, which is similar to the piece by Loewenberg Ball and Forzani (2011) calling for a common language regarding K-12 teaching. The trainers also believed the impact of the programs should be wide-reaching and

would help raise the value of teaching in their own institutions and the academy in general.

Though it is useful to see the intentions behind the development of these programs and the people who work with faculty, this study does not get at the ultimate question of whether training works, and if so, what type of training works and in what ways.

A recurring theme in literature about teaching training programs is the dearth of published evaluations of faculty development programs. In this subsection of literature, the term ‘faculty development’ is more common than ‘teaching training;’ the former term is more often used to describe programs for established faculty members, while the latter often refers to initial or early career training. Literature about the evaluation of these programs (Austin, 1992; Kucsera & Svinicki, 2010; Van Note Chism et al., 2002; Van Note Chism & Szabo, 1998) agrees upon the effectiveness of faculty development programs and the fact that institutional evaluation of such programs is fairly routine. However, very few of these evaluations are ever published. Kucsera and Svinicki (2010) conclude that scholars are not answering their own calls for precision in evaluation, and they believe one major barrier is the lack of evaluation training in higher education. Just as Buchanan (2011) argued, the authors believe quantitative evaluation has not been working and does not show enough information about the programs. They assert that qualitative methods should be the way forward, using ethnographies and case studies of faculty development programs, since faculty cases are unique and complicated by many factors.

A leading evaluator of faculty and teaching assistant professional development, Nancy Van Note Chism (Van Note Chism & Szabo, 1998), found that institutions often conduct evaluations on their professional development programs, but they are usually more focused on participant satisfaction than on the actual effect of the training. Using institutions in the Professional and Organizational Development Network in Higher Education (POD), the

researchers surveyed 200 institutions and found that 90 percent of them conducted routine evaluations of their professional development programs, with the main impetus being improvement of their services. However, respondents noted they only focused on satisfaction scores because it was too difficult to measure the impact their programs had on faculty members' teaching in the classroom due to research design flaws, low response rates, and faculty self-selection. Even in institutions that used extensive evaluation measures, the results were used internally and seldom published. This is problematic because institutions rarely have an impetus pushing them to reveal the evaluations of their programs, and without a body of literature describing best practices and common findings, would-be evaluators have no place (and often no reason) to start.

A thought piece by the same researcher (Van Note Chism et al., 2002) notes the rise in faculty development programs in the early 21<sup>st</sup> century and describes how the “reflective practitioner model” can be used for improving faculty development on campuses. By selecting a practice, experimenting with it, and reflecting upon its effectiveness, faculty members can improve their teaching with the support of teaching centers and development programs. Ultimately, the authors conclude, faculty development is no longer seen as an individual activity; the culture of teaching in higher education needs to promote collaborative communities of practice.

Austin (1992) conducted an evaluation of the Lilly Endowment's Teaching Fellows Program for junior faculty members. The program began in 1974 with the goal of supporting new faculty members in their teaching and professional development endeavors. Austin's survey was designed to analyze the effectiveness of the program, though she focused on broad effects such as socialization, career development, and relationships with colleagues, in addition to the

program's effects on one's teaching. She found that the program had a great impact on faculty members' teaching skills and attitudes, making them more interested in teaching and helping to renew their commitment to being an effective educator. A major argument that came out of this study was that there is a "need to view improved teaching as an organizational, not just an individual, responsibility" (Austin, 1992, p. 101). While professional development opportunities and programs such as this have been on the rise since the 1990s, the other literature reviewed in this paper has shown that improved teaching has not yet reached the organizational level at many institutions.

The overall trend in much of the literature on teaching training and faculty development is that, while it is effective, it is not evaluated, published, or given enough weight in higher education. Some literature argues for organizational change by suggesting a top-down approach from the administration in how they reward excellent teaching (Gibbs, 2005; Sorcinelli & Davis, 1996), while others advocate for a reframing of how teaching is talked about on campus (Healey, 2000) and how it is promoted through faculty development programs. Though there have been pushbacks from some faculty members, professional development programs for teaching have increased over the past decade due to heightened calls for accountability in higher education, especially in the United States.

### **Faculty Attitudes and Perceptions**

The literature reviewed thus far reveals that the movement towards a scholarship of teaching and learning has fueled numerous professional development initiatives both in the United States and abroad. Some studies (Austin, 1992; Coffey & Gibbs, 2001; 2004) have demonstrated that professional development can in fact improve faculty members' teaching, and

others have examined faculty members' perceptions of their own teaching and self-efficacy (Chang et al., 2011; Morris & Usher, 2011). However, very few studies exist that focus on faculty members' perceptions of and attitudes towards professional development for teaching. To fully understand the role of professional development on campus, it is important to examine how faculty members feel about these initiatives.

What appears most in the literature are studies targeting particular groups of faculty, such as those in medicine, pharmacy, or teaching at community colleges. Beyond those few articles, there are some empirical pieces focusing on faculty members' perceptions of and attitudes towards other programs and policies on campus; while this is not directly relevant to the subject of professional development, the studies show some techniques for gaining insight into faculty perceptions. Another category of literature features studies on the effectiveness of targeted professional development programs, not necessarily related to teaching, including culturally responsive pedagogy and faculty learning communities. These categories will be expanded upon below.

### **Toward Professional Development for Teaching**

As discussed above, most studies consider the intentions and beliefs of faculty members in teaching, but not their beliefs about teaching development. For example, in their study on faculty intentions in teaching, Norton et al. (2005) were only concerned with faculty perceptions and thoughts on their own teaching effectiveness. Norton et al. were not focused on professional development, teaching outcomes, or student learning, but instead on the conceptions of teaching as they differ by discipline. As discussed previously, the researchers found that conceptions and intentions varied across disciplines, levels of teaching experience, and institutions; it would have

been interesting to see whether faculty attitudes towards professional development for teaching would vary along similar lines.

The few studies that do exist on faculty members' attitudes all accept the notion that faculty professional development programs will increase teaching effectiveness. The most relevant piece, an empirical study by MacKinnon (2003), investigated pharmacy faculty attitudes towards faculty professional development. The researcher sent a survey to 600 randomly selected faculty members at 80 institutions, which resulted in a 38.3% response rate. He found that few respondents had completed formal faculty development programs on their campuses, though many had taken part in informal programs. In general, the study showed that clinical pharmacy faculty had a greater desire to participate in formal faculty development programs than non-clinical pharmacy faculty. The study also asked faculty their motivators for pursuing professional development; the top factors were improving teaching and research skills, as well as the overall quality of their work. Ultimately, the study showed that most faculty did not believe they received enough mentoring or institutional support for teaching. One interesting fact to note that might have affected the results of this study is that over half of the non-clinical faculty had completed post-graduate training or fellowships, and over 90% of the clinical faculty had completed a residency or fellowship after their graduate studies. These formalized programs may have had an effect on their level of mentoring and professional development before becoming faculty members, which may have impacted their expectations once they accepted their current positions. This type of post-graduate experience would be less common in the humanities and the social sciences, making MacKinnon's findings difficult to apply to all types of faculty.

However, despite their lack of overall generalizability, the results still demonstrate that most faculty members do not participate in formal faculty development programs. Those who show an interest in participating would hope to improve their teaching, research and the overall quality of their work. The author argues that higher education as a whole does not prepare and support faculty in their dual roles as educators and researchers, echoing sentiments from Healey (2000) and Austin and McDaniels (2006). Though this study mainly focused on pharmacy faculty, it is evident that faculty in various institutions nationwide are not participating in professional development. MacKinnon does not state whether the programs are being offered and the faculty are simply not attending, but the survey results seem to indicate that faculty desire an increased level of support for teaching on campus.

Another study that somewhat involves faculty perceptions of professional development examines the willingness of part-time instructors at community colleges in the United States to engage in opportunities offered on campus. Surprisingly, Sandford, Dainty, Belcher, and Frisbee (2011) chose to survey occupational education officers instead of the part-time instructors themselves; the authors clearly state this as a limitation of the study, but do not explain why they chose to conduct the study this way. Therefore, the researchers were asking occupational education officers *their* perceptions of the *faculty's* perceptions of professional development. They distributed the survey to 101 officers in all 50 states, and they gained a 51% response rate. The results showed that community colleges should consider providing at least one part-time faculty professional development activity per year, preferably in the fall and at night, since part-time faculty often have multiple other jobs and greater distances to travel to campus. Most notably, the results also showed that providing *per diem* and travel expenses would be of utmost importance in getting this particular demographic to participate in professional development.



This is very different from the pharmacy faculty study above, where the main impetus for participating was personal improvement. Personal growth was the second most popular reason for attending for community college faculty.

Again, the limitation of this study is that it asked one group's perceptions of another group's perceptions, meaning that there are problems in generalizability and in even knowing if these are the actual responses that part-time faculty would have given to the survey. However, the authors do state that part-time faculty are not participating in professional development at a high rate. Perhaps their reasons for not participating are different than the pharmacy faculty described above, but the study does not fully demonstrate why they do not participate.

In a similar vein, Duffy's (2012) dissertation study examined the perceptions of community college faculty members towards basic skills professional development. The author defines 'basic skills' professional development as programs that address the teaching of remedial math, English, or reading skills, which are mainly geared towards community college instructors. She surveyed 173 full and part-time faculty to determine why they chose to attend this particular type of professional development program and what they implemented in their classrooms after the program. Her findings demonstrated that participation in professional development helped part-time faculty feel supported by the institution, that faculty who feel supported are more likely to participate in peer mentoring and collaboration, and that faculty who participate in professional development have more positive perceptions of their role on campus, their students, and the institution as a whole. Above all, Duffy (2012) found that the main reason community college faculty chose to attend professional development programs was to engage with other faculty.

While the topic of this dissertation directly addresses faculty perceptions about professional development, even the author notes that a main limitation of her study is that it only illustrates the perceptions of faculty who chose to participate in professional development. The study also focuses on one subsection of faculty, those at community colleges, and one particular type of professional development, that which is geared towards basic skills. Duffy's (2012) work helps get closer to faculty attitudes, but it still does not examine the perceptions of faculty members who choose *not* to participate in professional development.

While not specifically about professional development, it is important to mention a dissertation that focused on understanding aspects of teaching-oriented faculty on an international scope. James Forrest (1998) undertook a study examining data from fourteen countries in order to see if teaching-oriented faculty had different opinions than research-oriented faculty. He found that, internationally, research-oriented faculty demonstrated significant similarities on topics such as the assessment of teaching and the international dimensions of higher education. The implications of this study, he asserts, are that there is a need to improve professional development programs for faculty teaching so that they can enhance the preference for teaching. In addition, there is a need for new ways of engaging teaching-oriented faculty in the overall academic profession. This study helps demonstrate the lack of emphasis placed on teaching at many institutions and the repercussions this can have for faculty who value teaching.

Some thought pieces, as opposed to empirical studies, clearly outline faculty members' perceptions of teaching and its development and pick up on many of the themes Forrest (1998) highlighted in his dissertation. As discussed previously, Shulman (1987), Boyer (1990), Bass (1998), and Healey (2000) all argued that teaching needed to be redefined in higher education. These faculty members expressed their opinions by proposing the integration of reflection,

assessment, evaluations, peer review, and qualitative and quantitative data into the scholarship of teaching. They believed that initiatives such as professional development would help reframe the importance of teaching in higher education; however, these pieces stand out precisely because they went against commonly held beliefs. These authors demonstrate a revolutionary opinion that was not necessarily popular in higher education at the time. Therefore, they cannot be taken as representative of all faculty members' opinions and perceptions of teaching and professional development in higher education.

Though Healey and many of his colleagues have formed organizations like the National Association for Integration of Research, Teaching, and Learning and the International Society for the Scholarship of Teaching and Learning (ISSOTL), they have not yet published an empirical study on a wider variety of faculty members' perceptions of professional development. In many of the other thought pieces written by faculty members that were discussed above, such as Buchanan (2011), Elton (2001), Fitzmaurice, (2010), and Karagiannis (2009), it is possible to see varying (and often negative) attitudes towards potential professional development programs on campus. However, besides the three studies by Duffy (2012), MacKinnon (2003), and Sandford et al. (2011), there is no large-scale examination of faculty members' attitudes towards professional development. Further, these three studies examined specific subsections of faculty, meaning that there is no study that examines a diverse group of faculty members' perceptions on this topic.

### **Toward Other Programs on Campus**

The second type of study found in the literature on faculty attitudes focused on faculty members' perceptions of other programs and policies on campus, such as promotion and tenure policies or faculty learning communities. There was also a major international survey

undertaken in 1991-92 to assess close to 20,000 faculty members' attitudes and opinions about general issues such as working conditions, students, evaluation, and governance (Altbach & Lewis, 1995), though this did not ask about professional development. Diamantes' (2004) work, which is also not related to the topic of professional development, is useful for understanding how to analyze results of a study on faculty opinions. He used an online survey to discern participants' perceptions of promotion and tenure. He was most interested to see if their perceptions would differ by salary rank/tenure status or by gender; it is interesting to note that he did find that perceptions differed by tenure status and not by gender. Those who had already earned tenure felt the process was clear and the committee was helpful, whereas those who did not have tenure disagreed. Future research could evaluate whether faculty members' perceptions of professional development would vary depending upon tenure status (or gender) as they did in this study.

The other major type of literature in this section involves studies that focus on evaluating the effectiveness of other types of professional development programs that are not related to teaching. Though some of these studies are not specifically about faculty perceptions and attitudes, and others are not specifically about teaching, they are useful because it is still possible to glean some insight into faculty perceptions about professional development. These studies also describe approaches to surveying faculty, which is useful for survey design and extrapolation of results.

A study by Haviland and Rodriguez-Kiino (2009) examined the impact of professional development on faculty attitudes toward culturally responsive pedagogy. While the study does involve faculty attitudes, the attitudes of interest to the researchers were faculty members' attitudes towards a type of pedagogy, not towards the professional development itself.

Nevertheless, the study is useful in that it is a case study of a particular professional development program and its impact on faculty, which the authors predict will then lead to improved student success. This logic model is the underlying assumption of most studies on professional development. It is important to recognize this overarching belief when evaluating authors' biases and conceptual frameworks.

Haviland and Rodriguez-Kiino (2009) noticed a cultural gap between faculty members and their students, who were increasingly Latino. They posited that this was a problem for student success, so they wanted to examine whether a professional development program would affect changes in faculty attitudes towards culturally responsive pedagogy. Data collection regarding the faculty was in the form of interviews and observations; though faculty elected to participate in the program, the researchers still noted some faculty resistance to being observed. The students of these faculty members were also surveyed. Ultimately, the researchers found that this particular type of faculty development did not affect the attitudes of faculty in the classroom. Student surveys showed the same results. However, the authors conclude this could be due to the fact that the study was not longitudinal; the development program took place over the summer and faculty and students were interviewed the following fall. The authors believe that this timeline was too short for them to find or expect major changes in culturally responsive teaching practices.

This study is useful for the purposes of this paper because its findings demonstrate that faculty's perceptions and attitudes are slow to change. It also shows that, even when participants voluntarily agree to partake in a study, researchers can still meet some resistance. Of course, these actions cannot be confined to faculty alone, since researchers on many other topics experience the same behavior.

Unfortunately, the survey's results are not what the researchers had hoped. Though they are not widely generalizable, it is still disappointing to see that faculty professional development programs on this particular topic may not ultimately affect student success, especially because that is an underlying assumption in much of the literature on this topic. Once again, however, the professional development program was very specific, so it is possible that professional development for broader teaching skills may be more effective, as Coffey and Gibbs (2001; 2004) found.

A similar study conducted by Butcher and Stoncel (2012) investigated the impact of a postgraduate certificate in college teaching on university lecturers' perceptions of acculturation. While this is not specifically a professional development program, the teaching certificate program had many of the same aims as programs aimed at enhancing faculty members' teaching skills. The authors' literature review highlights a theme from the Haviland and Rodriguez-Kiino (2009) study, namely that there is a wide gap between the expectations of professional development programs' impact and the actual impact on faculty members. The authors used grounded theory and a mixed methodology consisting of surveys, interviews, and focus groups. Their findings showed that this particular program had positive outcomes. It helped these university lecturers gain confidence in their teaching, develop new approaches to teaching and assessment, incorporate theory into practice, and center their teaching with a student/learner focus. These are many of the same outcomes that professional development programs discussed above hope to achieve.

As with the Haviland and Rodriguez-Kiino (2009) study, there is an issue of generalizability with these findings. This study was conducted in the UK, where teaching training and professional development is often required and holds a much more important place

on most campuses. In addition, this study only examined lecturers, so there is no way to know if faculty of other ranks would have the same experience. Lastly, Butcher and Stoncel (2012) conducted their study at a “teaching-led” university, meaning it is likely that teaching development and programs such as this postgraduate certificate are valued highly at an institution that focuses on teaching instead of research. Yet the study is still relevant to the overall topic of professional development and faculty attitudes towards it because it shows that, in cases such as this example, professional development is seen as a positive experience for many faculty members.

Since this second category of literature features many articles about evaluating professional development programs in general (not those specifically for teaching), it is important to mention at least a few of them here, since some trends emerge that are related to professional development for teaching. One trend is that, when evaluation does take place, it is often not focused on the attitudes or perceptions of the faculty participants. As noted above, Van Note Chism and Szabo (1998) found that institutions routinely conduct evaluations of their professional development programs, but they are usually focused on participant satisfaction rather than on the actual impact of the training or the perceptions of the faculty members before the training occurs. Evaluation that does not examine faculty members’ perceptions of the efficacy of the programs makes it more difficult to get the program started in the first place. Budgetary restrictions and low faculty participation rates contribute to the difficulties in arranging professional development programs, and without data on what types of programs faculty desire, it is even more difficult to design and implement programs. Evaluation of any professional development initiative on campus should utilize front-end or formative processes in order to help meet faculty members’ needs.

Another trend in this subsection of literature is the emergence of new types of professional development. A recent study (Malik, 2012) examines the influence of a particular type of faculty professional development that is growing in popularity: the faculty learning community (FLC). These are groups of faculty members that meet on a regular basis to discuss challenges and concerns, lesson plans, student successes, and any other topic that may arise. Some FLCs are more directed than others; this study focused on an FLC for faculty members teaching in a particular program targeting low-income, first-generation college students. The author conducted a qualitative study of faculty at a community college and a state university who taught in this program in order to see if the FLC would help their students succeed. She found that FLCs were able to help faculty create a sense of community in which they could discuss common struggles, fears of inadequacy or failure as teachers, and critical teaching. Ultimately, Malik asserts that FLCs can help promote reflective teaching and critical pedagogy. This particular form of professional development is not quite the same as teaching training or similar programs aimed specifically at enhancing teaching, since the topics an FLC discusses come directly from the participants themselves and can vary based on each individual group. However, it is interesting to note that the topic of teaching came to the forefront of the conversations in Malik's study, indicating that it is an area faculty want to discuss when given the chance.

A similar study from Spain attempted to evaluate a new professional development program instituted at the authors' university (Embuena & Hernandez Amoros, 2012). The program's main objective was to promote change in the culture of teaching at the university. However, the authors only surveyed leaders and coordinators of the program ( $n = 34$ ) and arrived at the conclusion that the program leadership felt that changes could be made on campus. They



also felt that student learning would be improved by this program. Without studying the faculty who took part in the program, however, it is impossible to know whether their attitudes actually changed as a result of this program.

Two more pieces bear mentioning in this literature review, though neither is an empirical study. Wilkerson and Irby (1998), two faculty members in the field of medicine, wrote a piece calling for a comprehensive approach to faculty development programs in the field of medical education. Though their specific focus is medicine, their argument applies to higher education as a whole. They argue that most faculty members are being called on to perform academic duties for which they have had no formal training. The authors cite theories of learning and ongoing research into instruction strategies as methods by which professional development for teaching can be improved. Their comprehensive approach recommends professional development, specifically for new faculty members, instructional development for all faculty members, leadership development, and organizational development. Instructional development would consist of workshops, peer coaching, mentoring, and consultations, while organizational development allows faculty to understand organizational policies and procedures that would help them advocate for rewards for teaching and continual learning. These suggestions clearly do not apply just to medical faculty; this framework could be applied to all institutions' comprehensive plans for improving faculty development programs in order to help faculty perform their roles more effectively. This article is relevant to the study of this paper because it is, in a way, the reflection of two particular faculty members' perceptions and attitudes towards professional development programs. It is also important to see that faculty development is lacking in medical departments and schools, showing that this problem is more far-reaching than just undergraduate education.

The other relevant piece is a systematic literature review of faculty development initiatives in medical education, which relates well to the Wilkerson and Irby (1998) piece. Steinert, Mann, Centeno, Dolmans, Spencer, Gelula and Prideaux (2006) examined literature in three major databases from the years 1980-2002. The search was aimed at finding empirical studies that addressed the effects of faculty development on the knowledge, attitudes, and skills of teachers in medical education. The authors found 2,777 abstracts that were related, though only 53 of these included data beyond simply participant satisfaction. This initial finding echoes Van Note Chism and Szabo's (1998) description of evaluations that only took into account faculty satisfaction with professional development; Steinert et al. (2006) were hoping to find studies that were more in depth and described the effects of specific programs. Overall, they found that faculty development initiatives such as workshops, seminar series, short courses, and longitudinal programs had a high rate of faculty satisfaction. Participants in these programs found faculty development useful and relevant to their career objectives. Most notably, participants reported positive changes in their attitudes towards both faculty development and teaching.

The literature review also found that most articles highlighted the key features of effective faculty development. These included experiential learning, feedback, peer and colleague relationships, well-designed interventions, and the use of multiple educational methods. Though these best practices are not directly relevant to this paper, it is useful to understand what is considered effective when thinking about how to design professional development programs in the future.

The problem with much of the literature reviewed by Steinert et al. (2006), as well as much of the literature reviewed in this paper, is that only faculty who have participated in the

professional development programs are being surveyed. It is of course more likely that these people will have more positive attitudes about such programs after having participated because, (1) they probably elected to participate in the first place, and (2) they have already experienced the program. It would be important in future studies to study faculty who had not participated, as well as those who had.

### **Previous Methodology and Current State of the Literature**

Though the scholarship of teaching in higher education is a growing field and professional development programs are increasing, there are some problems with the current state of the literature. Much of it comes from outside of America, it is dominated by thought pieces, and the empirical studies that do exist are limited in scope and methodology.

Since the SoTL movement has been stronger in Europe, most of the literature comes from the UK and other countries. Most of the major studies (Chang et al., 2011; Coffey & Gibbs, 2000; 2001; 2004; Gow & Kember, 1993; Norton et al., 2005) evaluate institutions outside of the US, making it difficult to see whether institutional and cultural differences would account for different findings with American faculty members in U.S. institutions.

The methodology varies amongst the empirical pieces, but it is dominated by quantitative methods. Most studies utilized surveys and condensed the responses down into numeric form, which various authors (Buchanan, 2011; Kucsera & Svinicki, 2010; Van Note Chism et al., 2002; Van Note Chism & Szabo, 1998) argue dilutes and demeans the profession of teaching because it cannot capture the entire classroom experience. Surveys also only allow for respondents to give their thoughts on categories and topics pre-selected by the researcher, instead of allowing for an in-depth conversation about various aspects of teaching or professional

development. While some studies attempted to use a mixed methods approach of numeric surveys and semi-structured interviews or open-ended responses (Austin, 1992; Coffey & Gibbs, 2004; Gow & Kember, 1993), very few of these examine multiple groups of participants. Most studies focus solely on faculty, with only Coffey and Gibbs (2004) looking at both faculty and students. While faculty are clearly important in studying teaching effectiveness and professional development programs, it is equally important to see how their skills in the classroom affect their students. Differing foci and the abundance of quantitative methodology yield a very limited view of teaching in higher education. Mixed methods studies, qualitative approaches, and examination of multiple groups (faculty, students, peer-faculty, etc.) could create a more holistic picture of the place of teaching training and professional development programs.

In terms of studies on faculty perceptions of professional development, only three studies exist, and all focus on small subsections of the population; MacKinnon (2003) studied pharmacy faculty in a quantitative manner, Sandford et al. (2011) focused on part-time instructors at community colleges, and Duffy (2012) examined full and part-time community college faculty. Malik (2012) studied a particular type of professional development directed at faculty who taught in a specific program; her main area of interest was not on the faculty members' attitudes towards the program, but on the effects of the program itself. Embuena and Hernandez Amoros, (2012), much like Sandford et al. (2011), attempted to understand faculty perceptions by surveying leaders of the institution or the program, which is a poor method for determining faculty perceptions. Of these studies, very few are grounded in theory. Treating faculty development as a learning and growth experience would necessitate an understanding of what it means for professors to learn (Neumann, 2005).

In addition to problems with methodology, some of the studies of professional development programs have problems with self-selection and low response rates. In some of the more recent UK studies, for example, teaching training was mandatory, while in other countries it was not; this affects the type of faculty members who are being surveyed, as only those who have a desire to improve their teaching will attend workshops. With the Coffey and Gibbs (2004) study on teaching training, it was not possible to pinpoint what may have accounted for the improvement in the training group; an additional year of teaching may have been enough experience to create improvement, as opposed to the professional development training in which the faculty participated.

Another problem is that many empirical studies are not comparable, as they focus on different measures. For example, the study of Taiwanese professors (Chang et al., 2011) found that teaching training does not have a significant impact on faculty's self-perceptions of teaching efficacy, while Coffey and Gibbs (2001; 2004) found that training does have a beneficial effect on a faculty member's skills in the classroom. Both studies deal with teaching efficacy, but one focuses on the faculty members' perceptions of their own teaching as opposed to their actual teaching skills. This highlights another key problem with the empirical studies that only looked at self-efficacy; understanding a faculty member's thoughts on his own teaching does not give a complete picture of how they are actually performing in the classroom. Therefore, it would be hard to tell what kind of impact a professional development program may have had.

Given these varying and international empirical studies and thought pieces, it is difficult to come to any conclusions about how to train faculty members to teach, how to improve current faculty members' teaching skills, and how to evaluate existing professional development

programs. However, it is clear that teaching in higher education is a growing priority, and faculty are not sufficiently trained in pedagogy.

### **Gap in the Literature**

Taken together, all the studies and thought pieces discussed above demonstrate a gap in the literature. It is evident that there is a push for a reframing of the role of teaching in higher education that has been going on since the early 1990s. In the 2000s, this led to the creation of teaching centers and myriad professional development initiatives on various college campuses. Some evaluation of these programs has been done (Coffey & Gibbs, 2001; 2004; Malik, 2012; Van Note Chism & Szabo, 1998), with the overall conclusion that they are useful in making faculty more effective teachers.

However, these professional development programs are still not very well attended nor promoted extensively on most campuses (MacKinnon, 2003). Why is that the case? Very few studies discussed here have aimed to understand faculty perceptions of and attitudes towards professional development *before* they have taken part in it. The research that does exist only gathers information from faculty who have elected (or been mandated to) participate in these programs (with the sole exception of MacKinnon's 2003 study). It is crucial to study *all* faculty, including those who are not taking part in professional development, to understand why they are not attending. What types of programs would better meet their needs? What can be done to help guide them towards such programs in order to enhance teaching and, ultimately, student learning outcomes?

Overall, the literature agrees that the place of teaching in higher education is a controversial issue on which consensus is unlikely to be reached, especially in light of increasing

accountability demands. The lack of an agreed-upon definition of “quality” teaching makes it difficult to evaluate and measure, though professional development programs, in some cases, have been shown to be effective according to certain measures. Taken together, these bodies of literature show that the professional development needs of faculty are not being met while at the same time, faculty, higher education organizations, and the public believe that more attention should be paid to teaching nationwide. An in-depth examination of faculty perceptions of and attitudes towards professional development for teaching enhancement would help administrators understand how to best meet faculty members’ needs. A mixed-methods approach would be able to statistically investigate a broad range of faculty members’ opinions while also gaining richer data from select participants. Without understanding faculty thoughts on professional development, it is nearly impossible to create more effective, better-attended programming. Research into faculty members’ attitudes could ultimately help develop teaching support and professional development programs that would be more useful to faculty, which will in turn increase participation and likely lead to improved teaching. Increased accountability in higher education should lead to heightened attention paid to teaching, ultimately leading to improved learning outcomes for students. This study is an attempt to bridge this troubling gap by illuminating the perceptual obstacles to involvement in systematic teaching development efforts on research-intensive college campuses.

### **CHAPTER III: Research Design and Methods**

This study seeks to understand faculty attitudes and perceptions toward professional development for teaching at research-intensive institutions. Studying faculty at institutions that are likely to prioritize research over teaching will aid in determining the myriad factors that affect faculty members' perceptions of teaching and professional development. Understanding these factors can provide context and explanations for their preferences and behaviors as they relate to professional development programs. The findings will allow research-intensive institutions, as well as other types of colleges and universities, to design professional development programs that will meet the needs and desires of their faculty members, thus increasing participation, and, ideally, advancing student learning outcomes.

This chapter lays out the research design and methodology of this mixed-methods study. I will discuss sampling procedures, including the sample size, margin of error, and issues of nonresponse. Information about the three pilot studies conducted prior to this research is presented. Next, both measurement instruments (which can be found in Appendix A and B) are discussed in detail, including the ways in which the survey and interview questions were derived. The chapter will end with the methods of data analysis, including statistical tests, hypotheses, coding schemes, and the formats for reporting the data. Lastly, the methods of data analysis and reporting are linked back to the framework and theoretical orientation for the overall study.

#### **Research Questions**

The overarching research question for this study is: What are faculty members' attitudes towards and perceptions of professional development programs for teaching on campus? Subquestions include: 1) How might these attitudes and perceptions affect individual



participation? 2) What type of professional development for teaching would faculty like to attend and see offered on their campuses? 3) How, if at all, do faculty demographic characteristics and professional contexts affect their attitudes and perceptions?

### **Research Design**

The research design was a mixed-methods study at two private, highly-selective, research-intensive universities in the northeastern United States. The mixed-methods approach involved both surveys and semi-structured interviews. This design is appropriate for the research question because surveys are a useful tool for gathering attitudes and opinions from a large number of people and generalizing them to the population (Bohner & Dickel, 2011; Tourangeau & Galesic, 2007), while semi-structured follow-up interviews are valuable for understanding the ecology surrounding these opinions, including the background and context of faculty members' lives and any additional relevant issues (DiCicco-Bloom & Crabtree, 2006; Fontana & Frey, 1994; Glesne, 2011). The qualitative nature of the interviews enabled the analysis to link the data to Bronfenbrenner's (1979; 1993; 1995) ecological model. The quantitative aspect of the surveys aided in understanding relationships between faculty member characteristics such as gender, age, discipline, and tenure status and their attitudes and perceptions.

Johnson and Onwuegbuzie (2004) argue that a mixed-methods design can result in a superior research product because it combines the most useful elements of qualitative and quantitative research. They believe it is "inclusive, pluralistic, and complementary...[while suggesting] that researchers take an eclectic approach to method selection" (Johnson and Onwuegbuzie, 2004, p. 17). They cite Johnson and Turner's (2003) fundamental principle of mixed research, which states that "researchers should collect multiple data using different strategies, approaches, and methods in such a way that the resulting mixture or combination is

likely to result in complementary strengths and nonoverlapping weaknesses” (Johnson and Onwuegbuzie, 2004, p. 18). The authors specifically advise adding qualitative interviews to the use of a closed-ended instrument, as I propose in my study, “as a way to discuss directly the issues under investigation and tap into participants’ perspectives and meanings” (Johnson and Onwuegbuzie, 2004, p. 18-19). They argue that supplementing a survey instrument, for example, with qualitative interviews can help avoid some potential problems caused by a strictly quantitative method. My study uses the qualitative responses from participants to understand the ways in which they make meaning of the topics in the survey.

### **Research Methodology**

The first part of the study is the survey, which was administered to all full-time faculty at two research-intensive institutions. This included faculty across disciplines, ranks, and tenure statuses at each university; the only requirement was that they must be considered full-time by their institution. As mentioned in chapter I, part-time faculty are not included as participants in this study because they are generally less involved with their institution and therefore with professional development programming on campus (Stenerson et al., 2010). The survey, which will be described in more detail below, ended with a question asking participants to volunteer to be interviewed as the second step of the study.

The follow-up, semi-structured interviews were conducted only with faculty who had already completed the survey and who self-selected as participants. A semi-structured interview protocol was employed with these participants; while the structure ensured that most participants were asked the same questions, the flexible nature also enabled me to ask follow-up questions and probes when necessary (Creswell, Hanson, Clark Plano & Morales, 2007; DiCicco-Bloom & Crabtree, 2006; Rossman & Rallis, 2012).

Because my research question seeks to understand attitudes and beliefs, as well as the context surrounding them, both qualitative and quantitative approaches are necessary. As my first pilot study (which will be discussed in a later section) illustrated, only minimal qualitative data can be gathered from a survey instrument. Even when open-ended questions appear on a survey, participants are less likely to answer these questions than to answer closed-ended items. When they do answer, they are not likely to write elaborate answers (Fink, 2009). Therefore, for this study, it was important to develop a qualitative interview process for expanding on the survey questions and gathering deeper data than the survey would allow on topics such as personal experiences, beliefs, perspectives, complex ideas, and cognitive processes (DiCicco-Bloom & Crabtree, 2006; Harris & Guillemin, 2012).

Qualitative interviewing encourages participants to share rich descriptions of phenomena, while leaving the interpretation and analysis up to the researcher (DiCicco-Bloom & Crabtree, 2006; Rossman & Rallis, 2012). In-depth, semi-structured interviews in particular have the ability to let the researcher ask a set of predetermined questions while allowing for either the researcher or participant to venture into related topics and questions (Glesne, 2011). This method suits my research question in that there are pre-determined topics that all participants will be asked about, but I recognize the wealth of knowledge that my participants have. It is possible that there are subjects I did not think to ask about in either my survey or interview protocol, so the semi-structured format of our interactions granted participants the freedom to guide the interview in directions that were useful and interesting to us both.

The data from the survey was captured by the online survey tool Qualtrics, which tracks answers, participation rates, and level of survey completion. Qualtrics also has various options for privacy settings, enabling me to ensure that the survey responses remained anonymous. The

survey opened with demographic questions about gender, age, discipline, and tenure status; these were then the independent variables used for statistical tests in the analysis stage. Another independent variable was each respondent's answer to the question, "How confident do you feel in your teaching?" The dependent variables were participants' answers on the attitude and preference survey questions. Both SPSS and Qualtrics were used to calculate descriptive statistics, such as frequencies, means, and standard deviations, as well as bivariate correlations and logistic and ordinary least squares (OLS) regressions. The survey data and statistical test results will be presented in charts, tables, and pie graphs in chapter IV.

Initial findings from the survey aided in setting up the semi-structured interviews, which were used to confirm and elaborate on the survey results. Semi-structured interviews were voice recorded and then transcribed by a professional transcriptionist. After they were transcribed, I used open coding and the constant comparative method (Miles & Huberman, 1994; Saldana, 2013) to determine the overarching themes that emerged from the qualitative data. The themes will be presented with poignant quotes and demographic information about which groups of faculty members reflect a particular theme in chapter V.

### **Sample**

The population about whom I seek to make generalizations is full-time faculty members in all disciplines at private, research-intensive universities<sup>2</sup> in the Northeastern United States. The sample for this study is full-time faculty members at two such universities. Their tenure statuses varied; they were tenured, tenure track, or non-tenure track (what some institutions call "lecturers," "instructors," or "professors of the practice"). Full-time faculty, even those not on

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<sup>2</sup> Carnegie Classification of Research University/Very High Research Activity (RU/VH) or Research University/High Research Activity (RU/H).

the tenure track, are the subject of this study because most professional development programs are geared toward this audience; they are more likely to be involved in programs on campus, and institutions tend to spend resources on programming for full-time over part-time faculty members (Huffman, 2000; Stenerson et al., 2010). Since generalizations will be made about this population at similar types of institutions, it is important to survey a range of genders, ranks, ages, and disciplines in order to capture a wide variety of opinions.

### **Survey Sample**

The study uses a purposive, criterion sample design (Patton, 1990) because there is a specific type of faculty member (full-time at one of two specific schools) that I wanted to capture in my study. In the survey, I examined what I believe is a universal relationship plus confounds. The sample may demonstrate that a third variable, whether it be gender, age, tenure status, or discipline, ultimately affects participants' attitudes and beliefs. It is important to examine the role of these confounding variables, but this did not affect the sampling design (Michael & O'Muircheartaigh, 2008). Therefore, a volunteer non-probability sample sufficed in this situation. If necessary, I could have used quotas to ensure that enough units in each group are represented in the sample. Instead, I compared the demographic survey data to the population demographics at each institution. Since the gender, discipline, and tenure status information is easily obtained on each institution's website, it was relatively simple to determine that my sample was representative of the population at each institution. However, it would be impossible to do this comparison with age groups, since it is not legal to make public employees' ages.

The sample for this study included full-time faculty at all seven schools at Institution A and all full-time faculty in Arts & Sciences and Engineering at Institution B. I decided not to survey the additional professional schools at Institution B because they do not have tenure

structures like the other schools that were in the sample. They also have their own structures for professional development in their specific disciplines. Therefore, it was likely that many of the survey and interview questions would not be applicable to the faculty at these schools. Instead of surveying all 875 full-time faculty working at Institution B's numerous schools, the survey was sent to only the 484 full-time faculty in Arts & Sciences and Engineering.

The names and email addresses of these faculty members were obtained from each institution's Provost's Office. At Institution B, I also worked with the Teaching Center to gain institutional buy-in; at both institutions, I offered to share the findings of this study with the administration in order for them to learn more about their faculty members' preferences.

The survey was sent out electronically to all eligible members of the sample group with a follow-up email reminder seven to ten days later. I sent a second reminder email to non-responders another week after that. The emails were automatically sent via Qualtrics, which has the ability to track who did and did not answer the survey. Then, when it is time for a reminder to be sent out, Qualtrics only emails those members of the sample who did not already complete the survey. In the IRB procedure and the Informed Consent letter at the beginning of the survey, on which participants stated their agreement before entering the survey pages, I specified that the survey was completely anonymous. The responses cannot be associated with faculty members' email addresses nor IP addresses in any way. This assurance should help faculty feel safer when answering questions, since they know that their employment cannot be jeopardized.

The survey was sent to a sampling frame of 1,183 faculty members at two institutions (Institution A: 699 full-time faculty, Institution B: 484 full-time faculty). Based on a wide variety of survey literature (Beam, 2012; Cohen, 1976; DeLeeuw, 2008; Fink, 2009), a good response rate for a survey would be 30-40%. Therefore, for a response rate in this range, the

overall sample size would be around 355-473 faculty members. Ultimately, 432 respondents answered the survey for a 36.5% response rate, which was on the high end of what is considered a good response rate.

It is important to have a large enough sample that an accurate representation of faculty members' opinions can be gained, while allowing for generalizability of findings. A power analysis shows that for a two-tailed test with an alpha-level of .05, a sample size of 134 participants is needed from each institution in order to detect a medium-sized (.3) difference between the schools. The final power analysis for this study is presented in chapter IV.

There are no definitive statistics on the number of full-time faculty at private research-intensive institutions in the Northeast United States; however, the American Council on Education data shows that there were approximately 498,201 full-time faculty in the country in 2009 (American Council on Education, 2009). Using this number as the population and a sample size of 660, with a 95% confidence level, the margin of error for this study would be 3.81. This projection shows a relatively small margin of error (sampling error); the smaller the margin of error, the more confident we can be in assuming that the survey's results are close to the "true" responses that the whole population might give. In fact, we can be sure the margin of error would be even smaller than 3.81 for this study, considering the fact that there are only 207 institutions in the country that meet the Carnegie Classification of Research University/Very High Research Activity (RU/VH) or Research University/High Research Activity (RU/H) (Carnegie Foundation for the Advancement of Teaching, 2014). The National Center for Education Statistics states that there are 4,495 degree-granting institutions of higher education in the United States (National Center for Education Statistics, 2014); according to the Carnegie Classification, only 4.6% of these would qualify as RU/VH or RU/H. Therefore, the population

of full-time faculty in these institutions would be far lower than 498,201; with a smaller population and the same sample size, the margin of error for this study would be smaller than 3.81, meaning we can have more confidence that the results are “true” for the whole population.

Though the exact number in the target population is difficult to estimate, the difference between that number and the sampling frame of 1,183 is the coverage error. Therefore, the most notable coverage error would be undercoverage. There are thousands of faculty members who are in the overall population but not in the sampling frame. I tried to account for this by selecting two institutions in the Northeast, thereby making my findings most generalizable to faculty at research-intensive institutions in this particular area of the country. The faculty in these universities also represent a mix of genders, disciplines, tenure statuses, and ages, which should help make the findings generalizable across the wider population.

Other coverage errors, such as duplication or ineligible units, are not likely to have affected this project. Because I obtained accurate, up-to-date lists of all faculty at these two institutions from their Provost’s Offices, which are usually in charge of promotion, tenure, and job contracts, it is unlikely anyone was ineligible or had inaccurate contact information. In addition, no faculty member was likely to be employed full-time by more than one of these institutions.

The sampling error is the mismatch between my sampling frame of 1,183 and my ultimate sample size of 432. To account for this, I compared the demographics of those who answered the survey at each university with the demographics of the eligible faculty at each university. These comparisons provide evidence that there was very little sampling error, as the sampling frame and sample size were not statistically significantly different.



Qualtrics is a useful tool in analyzing nonresponse on a survey. It can indicate how many units refused to participate in the survey. It also shows what happened to those who did not complete it; in a few cases, it showed that some participants entered the survey but did not get past the Informed Consent question. These respondents were not counted in the sample of 432 participants. Qualtrics also depicts how many people started answering questions but then stopped. By correlating these drop-outs to their original demographic answers (if they completed them), it would be possible to see if there was a pattern to those who did not complete the survey. Nonresponse was investigated carefully once the surveys were completed. Missing data, or questions that were not answered, were also investigated in order to determine if the data were missing completely at random (MCAR), missing at random (MAR), or missing not at random (MNAR). Both Qualtrics and SPSS were used to assess any potential patterns; it was found that some participants chose not to answer some questions, but there was no discernable pattern to these blank responses. Therefore, my assumption is that the overall data were MAR. The only pattern that emerged was that participants were likelier to skip open-ended questions; this is a phenomenon well documented in survey research (Fink, 2009), and it did not appear to affect the overall data.

### **Interview Sample**

The sample for the interview portion was also a volunteer, non-probability sample, but it likely represented extreme, information-rich cases (Patton, 1990) in which participants felt they had a lot to say on this topic. For these follow-up interviews with faculty who previously answered the survey, an ideal sample size was be approximately six to twelve faculty members. Based on the literature, semi-structured interviews with six to twelve participants are typically

enough to reach saturation (the point at which no new codes/themes are emerging in the interviews) in the data (Guest, Bunce & Johnson, 2006). In this study, eleven faculty were interviewed, and saturation was achieved.

The most likely participants to opt-in to the interview portion of the study were people who felt that they had things to say on the topic of professional development. This therefore yielded information rich interviews, and it also may have represented extreme cases (Patton, 1990) in terms of involvement or non-participation in professional development. These information-rich cases provided qualitative contexts to the quantitative survey results, and the extreme cases will be discussed in chapter V.

As mentioned earlier, participants self-selected by opting to be part of the interview at the end of the survey. Since the survey was anonymous, participants had to click on a button that opened up a new, non-anonymous Qualtrics page in order to sign up for the interview portion of the study. In other words, their survey responses were not connected to their interview responses. The ideal goal was to interview five to six participants from each institution, thus ensuring a good representation of faculty members across the two universities. Ultimately, seven were interviewed at Institution A and four participated from Institution B.

Surprisingly, more faculty members volunteered to take part in the interview than expected. At Institution A, 43 people volunteered, and at Institution B, 37 people volunteered. To select whom to interview, purposive sampling was used, as I had enough volunteers to ensure I could get a sample that crossed demographic groups. As their responses were disassociated from their names, I had to look each volunteer up on their institutional web page to determine their perceived gender, their tenure status and title, and their discipline. I began by choosing three males and three females at each institution. I made sure that they were not all from the

same discipline or tenure status. I also made sure that their ranks varied, which in many cases was a proxy for age; full professors were often older than assistant professors, though this was not always the case.

Next, I emailed the six people at each institution. At Institution A, only one person was not able to meet with me; I then selected two other faculty members who had similar demographics to replace him, just in case one did not reply. They both replied, however, and that is why seven people were interviewed at Institution A. Institution B was more difficult; two faculty members never replied, and two replied that they were too busy to meet with me. I emailed another batch of four; only two replied. This is why only four people were interviewed at Institution B.

These interviews were viewed as member-checks that enabled me to discuss the preliminary results of the survey with the faculty members I interviewed. As I already knew some of the major survey findings, such as the fact that females were more likely to go to professional development than males, I could use this as a talking point during the interviews. The interviews were a way to fill in any missing pieces in the data that the survey was unable to capture.

Because the interviews each took approximately 60 minutes, and because they were crucial to my study, I offered an incentive to entice people to participate. According to IRB protocol, the incentive must not be considered inappropriate or too extravagant. Therefore, I planned to offer faculty members \$20 gift cards to Starbucks or Amazon (their choice) if they opted-in, were selected, and completed the interview. This incentive obviously worked well, as so many people volunteered. However, once I went to purchase the gift cards for the interviews, I found that Amazon (which most faculty members selected) did not sell gift cards in \$20

denominations. As a result, I bought each faculty member a \$25 gift card and presented it in a thank you note after the interview was completed.

### **Pilot Studies**

Both the survey and interview protocol were pilot tested. The survey was piloted twice at the same institution: once during the fall of 2012 on faculty in the School of Education, and a second time during April of 2013 to faculty at a School of Social Work, a School of Theology, and a School of Management, all at an institution in the Northeast. The first pilot study resulted in a response rate of 43.6% ( $n = 24$ ). The second pilot study had IRB approval and was sent to a sampling frame of 143 faculty members. It yielded a response rate of 36% ( $n = 52$ ). These responses were combined with those of the rest of the full-time faculty at Institution A for the data used in this study.

The interview protocol was piloted during the summer of 2013. Five faculty members with a range of disciplines, ranks, genders, and ages each participated in a 60-minute interview that was recorded and then transcribed. A convenience sample was used to find these participants, and they worked at three different institutions: Institution A, a liberal arts college in the Northeast, and a liberal arts college in the Mid-South.

The interview data were coded to determine the most relevant and prevalent themes of the pilot study, and these themes were analyzed based on gender, rank, discipline, and age, just as the survey data were. The interviews brought to light various topics and issues that I had not anticipated before creating the survey or interview protocol; this demonstrated that the qualitative step of the study would be necessary for understanding the myriad issues facing faculty members. For example, the pilot survey did not ask any questions about how gender

affects one's experiences of professional development, but two of the pilot interview participants brought up this issue themselves.

Questions for both the survey and interview were developed after extensive literature reviews on the topics of professional development, teaching training, and faculty attitudes and opinions. The first pilot of the survey aided in revising aspects of the survey for the second iteration of the pilot. Both these pilots, as well as the interview protocol pilot, helped inform the final questions on the survey and interview protocol, ultimately enhancing its validity.

### **Data Gathering Procedures**

Gathering permission for this study required coordination with the IRB at each of the two institutions. The first institution, Institution A, is the same one where the pilot surveys were conducted; therefore, the IRB protocol was merely amended and updated in order to extend the survey to the remaining faculty at the institution. The data that were already gathered from the IRB-approved pilot study were used for this project, meaning that only the faculty at Institution A who had not already received the survey in Spring 2013 were solicited for this study in Spring 2014.

Institution B has a Teaching Center that works with faculty and regularly distributes surveys regarding its professional development programs. I submitted my proposal to Institution's IRB with the help of the staff at the Teaching Center, with whom I had been working to disseminate this survey. Institution B's IRB quickly granted approval once they had seen that the project was already approved by Institution A's IRB.

After IRB approval was granted, I obtained a list of all full-time faculty members' email addresses from each institution. I entered these addresses into Qualtrics to send out the first

solicitation email at Institution A in early April 2014 (see solicitation email in Appendix D). However, an unforeseen problem occurred at Institution B. Their Institutional Research department, which had to approve my survey, said that their faculty was too overloaded with surveys during the school year. They said they would grant me permission to send the survey, but they stipulated that I wait until after graduation to send it. Therefore, I did not send the solicitation email to Institution B until mid-May 2014. While the overall response rate was still acceptable (which will be discussed in the next chapter), it is possible that it was a lower rate than Institution A because the survey was sent over the summer. I also believe this could have led to the issue of fewer faculty replying to interview request emails. Faculty often travel or leave campus over the summer, and this may have played a role in the lower responsiveness from faculty at Institution B as compared to Institution A.

### **Measurement Instruments: Survey**

The survey was a web-based survey using Qualtrics, an online survey and analysis tool. Faculty members' responses were not associated with their email address nor IP address, thus ensuring confidentiality. The first screen of the survey was an informed consent page that participants had to agree to before entering the survey.

I developed the questions for the survey after an extensive literature review on the topic of professional development. I also used the process of expert review (Fraenkel, Wallen & Hyun, 2011) to determine the relevance of the questions; both a Vice Provost for Faculty and a Professor of Higher Education who specializes in faculty affairs reviewed the survey before its first pilot. After the first two pilots, I refined the questions to be sure they were clear enough to elicit good data. I also had numerous faculty members at both Institution A and Institution B give me their feedback on the survey questions before I sent it out.

As mentioned, the survey was sent out in early April 2014 at Institution A. A reminder email was sent ten days later, and a second reminder was sent seven days after that. The survey remained open until the last day in April; with web-based surveys, people tend not to reply after more than a couple of weeks (DeLeeuw, 2008). I selected April because this is typically not a time when faculty are overburdened; March is difficult with spring break and mid-terms, and May is too close to final exams, grading, and commencement. I also do not believe faculty will be eager to answer a survey over the summer months. My second survey pilot took place in April 2013 and yielded a 36% response rate, which helps verify my assumptions about timing.

However, despite my best planning, Institution B did not want the survey to be sent out in April. That is why it was sent the day after graduation in May 2014, with a reminder ten days later and another reminder seven days after that.

The 18-question survey was a mixture of demographic questions, multiple choice permitting one answer, multiple choice permitting multiple answers, and short open-ended questions. (See Appendix A for a copy of the survey instrument.) The demographic questions asked gender (female, male, other), age (range of years), tenure status (tenured, tenure track, non-tenure track), and discipline. The survey asked for faculty members' specific disciplines with a pre-populated list and a text box for "other." However, in the data analysis process, discipline areas were collapsed into: humanities; science, math, and engineering; and social sciences. This made analysis easier because discipline became only three categories instead of close to 50. The breakdown of which discipline went into which category can be seen in chapter IV.

Some participants may have received fewer than 18 questions due to the skip logic I have employed in the survey; for example, if they chose the option stating that they had never

attended any professional development programs, they did not receive the next question, “If yes, briefly describe what type of programs you have attended and why you chose to participate.” Instead, the logic skipped them to a multiple choice question asking them why they had not participated in the past. A later question asked, “How often would you plan to engage in some form of professional development if programs that suited your interests were offered on campus?” If participants selected the option, “never,” then they received an additional question asking, “If you selected ‘never,’ please briefly explain the main reason you would not participate.” However, if respondents selected any other answer here, they did not see this additional question. Therefore, the maximum number of questions any participant received was 18, and based on the data presented in Qualtrics, the average participant completed the survey in approximately five minutes.

The survey questions asked about faculty members’ knowledge of professional development on their own campuses, their past participation, and their estimated future participation. It also asked what types of professional development topics they would find most useful or interesting. For this question (and a few others), a pre-populated list was given, and participants could select as many answers as they wish.

*Example Question:* What topics of programs would be most useful to your teaching? (select all that apply)



What topics of programs would be most useful to your teaching? (select all that apply)

- ☐ course design (objectives, grading rubrics, etc.)
- ☐ classroom management
- ☐ using technology in the classroom (Powerpoint, clickers, lecture capture, etc.)
- ☐ e-teaching and online learning (Blackboard and other media that can be accessed outside the classroom)
- ☐ college student cognitive development (including varied learning styles)
- ☐ new and innovative pedagogical practices
- ☐ lecturing skills and techniques
- ☐ discussion skills and techniques
- ☐ integrating different teaching techniques
- ☐ grading and giving feedback on student work
- ☐ effectively utilizing graduate student assistants
- ☐ e-portfolios
- ☐ how to handle large classes
- ☐ addressing diverse (economic background, race, academic preparation, etc.) classroom populations
- ☐ dealing with cheating, plagiarism, and other difficult situations
- ☐ reflective teaching
- ☐ other

0% 100%

<< >>

Survey Powered By [Qualtrics](#)

Figure 1. Screenshot. Sample question with pre-populated list of answers in Qualtrics.

The short answer questions aimed to find out about faculty members' general beliefs on professional development, like whether it should be required and how involved the administration should be. The survey used both yes/no and Likert scales for the multiple choice questions and expandable text boxes for the open-ended questions.

In choosing the order for questions to appear, I decided to put demographic information and other shorter, easier questions closer to beginning. Some literature suggests that leading with demographics and easy, objective questions can help increase participation and survey completion (Fink, 2009).

I also decided to put the text box, open-ended questions towards the end of the survey. One of these asked for additional thoughts, just in case there were topics that a respondent would like to bring up that were not addressed on the survey, or in case participants find these more sensitive. Fink suggests that more sensitive questions, which in this survey are the open-ended responses, should be placed towards the end (Fink, 2009, p. 37). These are best at the end because they are not crucial to the survey's data, and sometimes respondents succumb to survey fatigue (Schaeffer & Dykema, 2011, p.919) and do not fully read or answer the final few questions of a survey. Therefore, I was still able use the rest of the survey data in analysis even if a participant did not answer all the open-ended questions.

**Visual design.** For the visual design of the survey, I used Institution A's standard template in order to add legitimacy to my survey (Lynn, 2008). Institution B had a similar standard template in their version of Qualtrics that was used for their survey. In addition, the look and feel of the survey needed to be as professional as possible. Using the template from each institution was assumed to make faculty more likely to respond because they could have felt that the survey was associated with the organization or had institutional support. These templates, plus the brief introduction about my research, hopefully helped impress upon participants the significance of the project, which is important for any type of survey (Fink, 2009).

In the introductory email for both institutions, I also let potential participants know that I was working with the administrators and/or Teaching Center at their institution and would be sharing the data with staff in charge of professional development programming at each school. This was an attempt to increase participation because participants could see this survey as a way

to communicate their views about campus programming to the people at their institution who are directly involved with it.

In questions where scales were used, I chose to use vertical scales. I also used a vertical list for the questions in which I asked participants to select all options that would apply.

Research shows that vertical lists encourage participants to read each option more carefully than they would with horizontal lists (Dillman & Smyth, 2007), so this layout choice should have helped in collecting more accurate data.

It was also important to pay attention to the sizes of text boxes in questions where respondents fill in their own answers. The boxes should not be too large, because this can overwhelm respondents and imply that they have to type very long answers. But it is also important not to make the boxes appear too small, because they could be overlooked or encourage not very thorough answers. I tried to make the response boxes a medium size that would encourage in-depth, but concise, answers.

Lastly, in my introductory statement containing a definition of professional development for the purposes of this survey, I used bold font to indicate that the subject matter is teaching development only. Bold font is important for showing emphasis in Internet surveys in particular because the text and graphical language are the only way for a researcher to convey his or her meaning to participants (DeLeeuw, 2008).

**Maximization of participation.** An element of the survey that utilizes both skip logic and a maximization of participation principle came after the Informed Consent question. If participants selected “yes,” they moved on to the rest of the survey. However, if they said “no,” then it would take them to a custom message through skip logic. This custom message asked if they were sure that they did not want to take the survey and encouraged them to click on the

initial link again. This as a method that can help increase the number of participants on the survey by giving them a second chance to opt back in.

It is also important to ease participant burden in survey research (Fink, 2009). One way to do this is by making page breaks at natural points in the survey, thereby controlling how many questions appear per page so that survey respondents do not feel too overwhelmed by too much information appearing on the screen at once (Dillman & Smyth, 2007; Fink, 2009). In addition, I included a progress bar at the bottom of the screen to help participants feel a sense of accomplishment as they move through the survey and let them know how much more they have to answer (Fink, 2009). I also included a back button to allow participants to return to previous screens (Fink, 2009).

To help participants feel comfortable taking the survey, I selected the “anonymize response” option in Qualtrics. This means that I would not be able to associate participants’ responses with their names, which was something that was promised in the informed consent letter. However, the software is able to record which invitations have been responded to, so I was able to go back later and send reminder emails only to those participants who did not reply. These reminders were intended to help increase the number of participants (Fink, 2009), and the tool allowed me not to bother people who have already replied. Qualtrics software also makes it possible to send thank you emails to those participants who have answered the survey; I sent thank you emails to participants at both Institutions approximately one month after each survey closed.

One other unique feature of Qualtrics is the “request response” tool on each question (as opposed to requiring a response). Making questions required could result in an error message if respondents skip a question, and it might annoy some participants and therefore jeopardize their

continued participation (Dillman & Smyth, 2007). Instead, Qualtrics allows the survey to kindly nudge people into answering, and I enabled this feature on each question. If someone left a question blank, a message would pop up asking them if they were sure they wanted to leave it blank. This would help ensure data quality by reducing partial responses. For the last question about any additional thoughts, I did not “request response” because I understand that participants may not have anything to add in this section.

I also enabled the Qualtrics feature that allows participants to begin a survey, close it, and return to it later in the same place. This is one major benefit to web surveys (DeLeeuw, 2008) that can help increase participation rates and ease the time burden on respondents.

### **Measurement Instruments: Interview Protocol**

Before preparing the initial interview protocol, it was necessary to read background information on how to develop a semi-structured interview. In semi-structured interviews, the interviewer must be flexible enough to ask probing questions along lines that might need elaboration or seem potentially fruitful (DiCicco-Bloom & Crabtree, 2006; Muncey & McQuillan, n.d.). The basic research question, “What are [your] faculty members’ perceptions of and attitudes toward professional development for teaching?” guides each interview. The protocol’s topics were divided into general categories (Muncey & McQuillan, n.d.), such as: general information, past experiences with professional development, campus-specific questions, and general thoughts and preferences about professional development. These categories made future analysis easier, since disorganized and unbounded interviews often result in messy data (Rossman & Rallis, 2012). Additionally, two faculty members with expertise in educational research reviewed the interview protocol.

The protocol began with background information and straightforward, nonthreatening questions (DiCicco-Bloom & Crabtree, 2006; Muncey & McQuillan, n.d.) in order to develop an easy rapport with the participant relatively quickly. Rapport with the participant is important in qualitative interviews because it can engender trust, thus enabling the participant to feel free to share information with the interviewer (Whiting, 2008). The first stage of a qualitative interview, as DiCicco-Bloom and Crabtree (2006) describe, has the goal of getting the interviewee talking. Therefore, they suggest asking a broad and open-ended question towards the beginning. My first question, after the basic demographic information, was “Would you please tell me about any professional development activities on your campus?” This is broad and directly related to my research question, as well as to my follow-up questions. Glesne (2011) suggests beginning an interview with what he calls a “grand tour” question, such as this one. On this particular question, I was not interested in whether their answer is “correct” or “accurate;” I was interested in hearing their perceptions of what is offered on their campus and whether they are aware of any opportunities taking place. This question helped put participants at ease when we started the interviews. I also began many interviews with small talk in order to help create a level of comfort between myself and the faculty member.

Overall, it is important that the majority of the talking be done by the participant (Rossman & Rallis, 2012), so most questions in the interview protocol were fairly open-ended. I also developed questions that ask for descriptive information, such as, “If you have gone to any of these activities, would you please describe them to me?” Besides descriptive questions, semi-structured interviews also benefit from the use of comparative and hypothetical questions (Muncey & McQuillan, n.d.); therefore, I asked participants to compare professional development programs at their current institution to those at institutions where they had

previously worked (if they have worked elsewhere). To ask about hypothetical situations and get participants talking more about their preferences, I created the question, “What subject areas of professional development would you want to see offered on your campus?” and “Ideally, how would you like to be notified about professional development activities?” Following Glesne’s (2011) advice, the protocol avoided asking participants yes/no questions and anything that could be deemed a “knowledge” question, making them feel as if they are being tested. These types of questions often do not elicit descriptive data.

In drafting the interview protocol, it was also important to think about prompts, or smaller, related questions that can help draw out more information if a participant might need some prodding (Whiting, 2008). Whiting (2008) suggests making a list of these beforehand in order to avoid embarrassment or stalling on the part of the interviewer. As with interview questions, it is crucial to make these prompts open-ended and non-directional so that the interviewer does not lead the participant. I developed numerous prompts for each question, such as:

2A. If you have gone to any of these activities, would you please describe them to me?

2i. If you have gone, how often have you gone?

2ii. What prompted you to go?

2iii. In what ways, if at all do you feel that the time you spent at these activities was rewarding?

2iv. In what ways, if at all do you feel that the time you spent at these activities was rewarded? (Prompts: Did the administration recognize this? Did you get credit from your department? Was this counted towards your tenure/promotion process? If so, how?)

Developing a list of prompts and structured questions grants the interviewer freedom when asking questions. Not all prompts were asked of each participant. (Please see Appendix B for the full interview protocol.)

The pilot study aided in creating the interview protocol. In the pilot, I asked participants if they had ever participated in professional development in the past. I soon realized that participants found this question odd; they knew about the topic of my research, and they said they would not have agreed to participate in an interview about professional development if they had no familiarity with the topic. Though I was still careful not to assume familiarity in any of the interviews, I found a way to ask this question casually as one of the ice-breaker questions instead of making it a more formal question.

In the pilot study, I found that the majority of participants brought up the topic of graduate school training for teaching, which turned out to be a major theme in the findings. They were eager to note that they had very little pedagogical training while working on their doctorates. Because this appeared to be a topic that affects perceptions of professional development for teaching, it was added to the interview protocol for this study.

**Interview procedures.** As mentioned previously, participants opted-in to an interview by selecting the box at the end of the Qualtrics survey, where the incentive of the \$20 gift card for interviewed participants was mentioned. Selecting the box took them to a new page where they entered their email address so I could contact them to set up an interview time. After I contacted the participants at each school, in the manner discussed above, I scheduled 60-minute interviews during the months of May, June, and July. Faculty members may be busy in May or travel during the summer, so I wanted to leave a wide window in which I could conduct interviews. In addition, I allowed the participant to select the location where we met, as Whiting



(2008) says this grants them a feeling of comfort, which tends to encourage them to share more with the interviewer. Ultimately, most faculty members chose to be interviewed in their offices on campus. One participant at Institution A instead wanted to meet in my office, and one participant at Institution B selected a coffee shop.

The literature review on qualitative interviewing also helped guide logistical processes. For example, it was necessary to decide how to record the interviews. Whiting (2008) notes that audio recorders help free the researcher from the distraction of taking notes, but it is important to first ask the participant if they are comfortable with being recorded. I began each interview with a statement of purpose behind the interview, an explanation of the larger project, and a request to record the conversation (Whiting, 2008). I was also careful to provide a statement of confidentiality and an explanation of how I would protect their identities.

Protecting participants' anonymity is especially important because I interviewed them in a professional setting, and there might have been concern that anything negative said about their employers or their own work performances could jeopardize their position (DiCicco-Bloom & Crabtree, 2006). I was careful to protect them from potential harm and reduce any risk to their professional status. In my opening statement to participants, I noted that they could feel free to decline to answer at any time (Whiting, 2008). Finally, before beginning the interview, I asked the participants to sign an informed consent form. This form stated that their identities will be confidential. (See Appendix C for Informed Consent Form.)

**During the interviews.** The first phase of the interview is known as "building rapport." In this phase, I asked general background and broad, open-ended questions. Whiting (2008) calls the second stage the "apprehension phase," followed by the "exploration phase," in which the interviewer and participant are getting to know each other. Next, the "cooperative phase" is

when the participants are less worried about offending one another, and they have finally reached a level of comfort. However, Whiting (2008) believes it is not until the “participation phase” that the participant shares the greatest amount of information. In the “concluding phase,” it is important to end on a positive note, perhaps mentioning how the participant’s data will help inform the final product. In my interviews, I was careful to follow these suggestions, especially telling participants how much help they were providing for my dissertation study. Since all of the participants I interviewed (except one) had previously written dissertations themselves, I believe that this helped them understand how critical their participation was to me. Most importantly, I explained to them that the anonymous data from their interviews will be given to the Teaching Center on their campus, which will then use their feedback in designing future professional development programs. I believe this helped them provide more specific information to me in the interviews because it could translate into a tangible difference on their campuses. Additionally, Whiting (2008) mentions that in the concluding phase, participants might even say how they felt about the interview. Indeed, during these interviews, I found that many faculty members said that they found it enjoyable and beneficial to reflect on their own experiences. We often spoke about higher education in general, and their disciplines in particular, both before and after the interview.

During the actual interview itself, it was important to express interest both verbally and nonverbally by smiling, being alert, saying, “yes” or “I see,” and asking for clarification or rephrasing what the participant was saying. These small yet crucial details help continue rapport with the participant and make them feel more comfortable, thus leading them to share more information (Fontana & Frey, 1994; Rossman & Rallis, 2012). Sometimes issues will arise; the most common would be participants not remembering every detail of an experience. This is

especially true in interviews that ask about memories and perceptions (Harris & Guillemin, 2012), as this project did. Harris and Guillemin (2012) suggest that interviewers should find alternative routes in order to get at participants' memories, such as asking sensory questions like, "What did that look like?" or "How did that feel?" Though these exact prompts may not be entirely applicable in talking about professional development programs, the general concept was kept in mind for instances when prompts can help participants describe their experiences at these programs.

Another main issue in interviewing is that people might not explain everything to the interviewer. This can be because they do not remember or do not believe it is relevant, they do not want to feel foolish, they feel vulnerable, or they believe it is too risky to tell (Harris & Guillemin, 2012). It is entirely possible that participants did not think things they had done were relevant and therefore would not explain them to me. Therefore, it was critical to define "professional development for teaching" at the beginning of the interview because it was possible that interviewees had participated in events I would consider professional development but that they might not. I reminded them that the definition of professional development for these interviews was the same one provided at the top of the survey they previously took:

For purposes of this survey, we use the term "professional development programs" to refer to any type of organized event on campus aimed at enhancing the **teaching** skill set of faculty.

Another potential issue was whether faculty members embellished their participation in these programs; they knew that this topic was important to me and my research, and if they felt foolish or unhelpful for not having attended any programs in the past, they could easily have

fabricated or exaggerated their past experiences. These are major risks when engaging in qualitative interviewing, especially when it involves memory and past behaviors.

Reflexivity on the part of the interviewer is important in both the interview process and the analysis of the data. It is crucial that the researcher's values, assumptions, prejudices, and influence are understood and acknowledged throughout the study (Whiting, 2008). Glesne (2011) notes that the researcher should behave in a non-threatening, caring, grateful manner and should also be aware of power and hierarchy in the interviewing process. Interestingly, Glesne (2011) is referring to the fact that the researcher is generally interviewing those with less power than he or she has. However, in this study, as in my interview pilot, I had less power than my participants in that I was a graduate student doing research and they were already faculty members. Because they all had been former graduate students themselves and, in some cases, were used to advising graduate students, we were immediately placed into the power dynamic and hierarchy of academia, which is very clear-cut in ranking faculty members above graduate students. (For a full discussion of the power dynamics associated with interviewing elites, see Joshua Gamson's article "Stopping the Spin and Becoming a Prop: Fieldwork on Hollywood Elites" in the 1995 volume *Studying Elites Using Qualitative Methods*.) Therefore, Glesne's (2011) advice works in reverse in this particular situation, where I may have felt as if I had to be overly grateful that faculty would take the time out of their busy schedules to help me with my research. Though this dynamic was in the back of my mind at all times, I found that it was not a major issue in this or the pilot study, as all participants were accommodating, kind, and did not invoke the power relationship.

Gender and other demographic factors also influence the power relationships in qualitative interviewing. As Rubin and Rubin (2005) note, gender, professional background, and

age can influence the interview relationship. While my professional background is as a high school teacher, which came up during most of the interviews, this is generally considered less academic than being a faculty member in an institution of higher education; therefore, I believe that the participants may have seen themselves as experts in teaching while I was not.

Fontana and Frey (1994) believe that qualitative interviewing is traditionally paternalistic. Gender makes a difference in how the conversation goes, and it also influences the analysis of the data. In my pilot study, I found that the female participants were more willing to share information with me, perhaps because participants often respond more favorably to interviewers who are similar to themselves (Whiting, 2008). Rossman and Rallis (2012) argue that shared social group identities can be a powerful tool in the interviewing process because it can elicit richer data. This could have been the case with the two female participants I interviewed in my pilot study, who were also both around my age. They shared much deeper feelings with me than the males did, discussing thoughts of their own inadequacy, embarrassment, and how they felt marginalized on their campuses because of their gender. With both females, I deviated more from the interview protocol to talk about issues of gender, whereas the three male participants never once mentioned gender in their interviews. Because of these interactions in the pilot study, I was more equipped to deal with issues of gender in the interview and data analysis processes during this project. As chapters IV, V, and VI will show, gender is a very relevant aspect of this study.

Lastly, I was careful about framing the interviews with participants because they all had completed the survey and likely would not want to cover the same material again. Therefore, for these interviews, I presented them as member checks (Rossman & Rallis, 2012) where I mentioned some basic findings from the survey data and asked interviewees what they think or

feel about the data. This both adds depth to the survey data and allows the participants to guide the interview and bring up questions and categories that I had not thought of (which happened in the pilot interviews with the issue of gender in faculty development). Most importantly, these interviews were aimed at finding out how people's demographics and professional roles and contexts affect their interpretations of questions related to the topic of professional development. Overall, the interview data helped elaborate upon the survey results and lead to a deeper level of interpretation regarding faculty members' ecologies.

### **Positionality**

As briefly mentioned above, my background and demographics shaped the way in which I viewed this study and the way in which my participants viewed me. I bring particular attitudes about teaching and professional development to this project that I do not attempt to hide; as a former high school teacher, I know how important teaching skills are, especially when you do not always have students at the same level of academic preparation in the same classroom. Pedagogy is a difficult concept, but I believe it is just as important at the college level as during the K-12 years. However, it has always surprised me how little focus faculty preparation (usually meaning graduate school programs) puts on the actual practice of teaching.

Besides the fact that I view teaching as important and undervalued in higher education, I have also worked in administrative jobs that shape my views of this study. I have worked in the Office of the Provost at Institution A, where I interact with faculty on a daily basis. In another institution, I have worked in a Teaching Center, which truly has helped shape my understanding of professional development and the people who participate in it.

Before becoming a high school teacher, I took courses in pedagogy along with my subject area. These courses on educational theory, learning styles, and classroom basics helped

me gain confidence in the classroom and enabled me to meet the needs of a wide array of learners. This is why I believe it is possible to enhance one's teaching skills through pedagogical training.

These experiences, along with my gender and demographic information mentioned above, all affect the way I designed the study, the way I interacted with participants, and the way in which I analyzed my data.

### **Method of Data Analysis**

Data from the survey and interviews were analyzed separately and then integrated. Because the survey is the first stage of the study, and I planned to use preliminary findings to frame the interviews with participants, I analyzed survey data first. After the interviews were completed and analyzed, I went back and integrated the results to find patterns and relationships between the data. The means of integration will be discussed in detail below.

### **Survey Data Analysis**

Results were tracked in Qualtrics, which calculates statistical analysis on categories based on demographic information, such as age, gender, disciplines, and tenure status, as well as institution. The data were then imported into SPSS from Qualtrics in order to view descriptive statistics such as frequencies, means, and standard deviations for the questions that included Likert scales or yes/no answers. These were questions like, "If programs were more widely available and advertised extensively, how likely would you be to attend?"

- 1 = not likely
- 2 = somewhat unlikely
- 3 = neutral
- 4 = somewhat likely
- 5 = very likely

I also conducted these simple tests on questions like, “Have you attended any professional development programs on campus? (yes/no).” The frequencies, means, and standard deviations for all survey questions will be presented in the next chapter; they can also be found in a different form in Appendix E.

**Hypotheses and variables.** On a basic level, I conducted chi-squares and t-tests for the data on the eight closed-ended questions, comparing responses by demographic group to get an overall picture of the preliminary survey data. All tests used alpha level of .05 in determining whether a result was statistically significant. Next, I conducted ordinary least squares (OLS) regressions in SPSS for the survey questions with continuous outcomes (question #11), and I conducted logistic regressions for the survey questions with categorical outcomes (questions #5, 6, 9, 10, 12, 13). The results of the statistical tests were compared to the null hypothesis that faculty perceptions and attitudes do not vary based on gender, age, discipline, tenure status, and institution. The tests aided in determining the unique contributions of gender, discipline, age, and tenure status (if the null hypothesis is false) on variability in attending professional development, plans to attend in future, and degree of viewing it positively. The tests determined whether the model is significant, meaning they will show whether demographics and confidence in teaching ultimately affect these aforementioned outcomes.

The independent variables for the chi-square and t-tests were the demographics of gender, age, discipline, tenure status, and institution, as well as the respondent’s confidence in their teaching. The dependent variables were the responses on each of the eight quantitatively measured survey questions. These categorical responses were given numeric values (1-5 for Likert scale and 1-2 for yes/no responses). Age and confidence in teaching were already continuous variables. To get demographic variables as binary variables in order to detect



differences between the groups for the regression tests, I assigned dummy variables for gender, tenure status, and discipline. For example, “1” was assigned to anyone who was tenured, while “0” was used for anyone who is not tenured (non-track or track).

The closed-ended survey questions that served as dependent variables are listed below, along with their scales. (Please note that the number of the question in this list does not necessarily correspond to the number on the actual survey, which is in Appendix A.)

1) Are you aware of any professional development programs offered on your campus?

(yes/no)

2) Have you attended any professional development programs on campus?

(yes/no)

3) If programs were more widely available and advertised extensively, how likely would you be to attend?

(5 point scale, very likely to not likely)

4) How often would you plan to engage in some form of professional development if programs that suited your interests were offered on campus?

(4 point scale, once a month to never)

5) In general, how much importance do you think should be placed on professional development programs for teaching?

(5 point scale, great importance to very little importance)

6) How useful do you believe professional development activities on campus would be for your teaching?

(5 point scale, very useful to very useless)

7) How would you rate the importance placed on teaching development at your institution?

(3 point scale, overemphasized to underemphasized)

8) How involved do you think an institution should be in promoting professional development for faculty teaching on campus?

(4 point scale, extremely involved to not at all involved)

In determining which regression models to set up, I let the results of the qualitative interview data guide the specific tests. I also included independent variables that were statistically significant in the chi-square and t-tests in the regressions. For example, gender was a theme that emerged from the interviews and also had a significant bivariate relationship in the preliminary round of testing. Therefore, I used it as the independent variable in the multivariate tests to estimate its association with the dependent variables (closed-ended questions) mentioned above. Using the ordinary least squares (OLS) method for continuous outcomes and logistic regressions for awareness and attendance (categorical outcomes) also served as a way to test the predicted outcomes for certain independent variables, such as gender or tenure status, against the actual recorded responses. In this way, the qualitative data were incorporated with the quantitative data from the study.

The short answer (open-ended) questions from the survey were evaluated qualitatively and coded by theme. The themes were similar to those found in the survey and interview pilot studies; however, new themes also emerged. Coding was done using open coding and the constant comparative method (Miles & Huberman, 1994; Saldana, 2013). An element of Qualtrics that aided in analysis of these questions is the feature that allows the naming of each

survey question. This made exporting and analyzing data easier in that each question had a pre-determined code or name that describes what it is about.

### **Interview Data Analysis**

The themes for both the open-ended survey questions and the interview data were similar. The initial coding scheme was developed during the interview pilot, though some new themes emerged in the final study. Initial (or open) coding was then followed by a second cycle of axial coding (Saldana, 2013).

After the interviews were transcribed, they were coded and analyzed for patterns using constant comparative method (Miles & Huberman, 1994). The initial coding scheme featured thematic codes that were somewhat broad, meaning that any piece of information that related to the overall topic would be coded for that category (Saldana, 2013). They were all developed inductively after open coding the pilot interview transcripts. Going into the coding process this time around, there were eleven codes: general perceptions of teaching & motivation; graduate school preparation; time/scheduling issues and frequency of participation; what formats/topics were preferred; means of communication & messages from the institution; required versus not required professional development; the role of teaching and professional development in higher education and professional organizations; critiques of professional development; perception of those attending professional development; tension in research versus teaching and work/life balance issues; and gender/age/race issues.

However, the codes changed slightly based on the data. For example, the code “time/scheduling issues and frequency of participation” became two separate categories. In addition, “work/life balance” was originally combined with the topic of tension in research versus teaching. During this process, it was instead combined into “time/scheduling issues” after

“frequency of participation” became its own code. Because so many faculty in these interviews talked about incentives from the institution in order to participate in professional development, the topic of incentives was added to “means of communication & messages from the institution.” The final list of codes and their descriptions can be seen in chapter V.

After coding, the color-coded pieces of transcripts were searched for trends in each code to determine what the faculty members’ attitudes and perceptions were in each of these broad areas, thus turning the codes into themes. Charts were made with each theme and a list of the demographics that tended to display the theme. Next to each theme were salient quotes that described the theme. In addition, the qualitative survey data were coded with these same codes and themes, thus integrating the two sets of data. For example, one of the survey questions asks about preferred topics and formats of professional development; this is also a theme that I looked for in the interview data. These charts that were used in this step of analysis can be found in Appendix F.

While the deep data analysis did not occur until after all the interviews were completed, analysis was ongoing throughout the whole process. Emerging trends and issues were noted after each interview (DiCicco-Bloom & Crabtree, 2006), thus enabling me to revise and rethink my protocol probes for future participants. This was very useful in this study and in the interview pilot because I was able to see whether participants were having trouble with any particular questions.

### **Integration of the Data**

Because of my two means of data collection, it was important to integrate the data in meaningful ways. I began by comparing the codes that emerged from the survey’s open-ended questions and those from the interview data to determine where there was overlap. Then I

created a new, comprehensive list of themes from all the qualitative data. The quantitative data worked in the reverse way: each of the eight quantitative questions on the survey already had a code indicating its subject. The frequencies of each of these questions then became a theme, indicating what most people were likely to respond about each subject. These general themes were added to the list of qualitative themes mentioned above, with notes made on which demographic groups were represented in each theme.

Once the themes of the interview and survey data were combined, I performed a higher level of integration, this time based on the null hypotheses from the statistical tests. For each of the eight quantitative areas on the survey, I determined how each demographic group (gender, age, discipline, institution, and tenure status) viewed the subject and how, if at all, their views differed. As mentioned above, the interview data also helped inform which independent variables were used in the regression models, thereby integrating both types of data.

These statistical results are the core of the findings. I see the qualitative data as the information that surrounds these findings and fills in the gaps, thus creating a fuller picture of what is happening in faculty members' lives and how these factors influence their perceptions and beliefs (which are at the center of the data). The integration model appears in Figure 2 below:

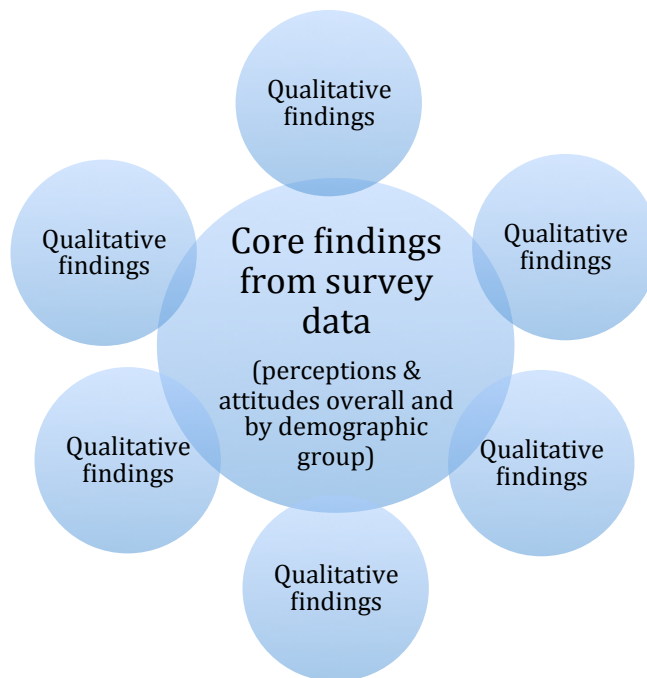


Figure 2. Conceptual map of data integration

Therefore, in describing the big picture of the data in chapter VI, I will present the core findings and outcomes, but will then supplement it and attempt to explain it with the qualitative data. In this way, the interview data help provide a story and context for the quantitative survey data. For example, statistical tests produced the finding that women were more likely to attend professional development than men. In chapter VI, I will use the interview data from female participants to try to explain why this might be the case. Because the survey data from a large number of participants are the core set of findings while the interview data are used as a supplement and member-check, it should not be a problem that the responses of a small number of self-selecting participants are used to provide context for the major findings.

### **Formats for Reporting the Data**

In the findings section in chapter VI, the answers to the survey questions will be presented question-by-question. For the majority of the data, tables and graphs will be used to

summarize the initial findings for each question. For the two questions about preferred format and topic of professional development, I created pie charts and tables that show the proportional answers that faculty members have given. For the eight quantitatively measured questions (sliding scale, Likert scale, and yes/no responses), I show cross-tabulations that break down the answers by demographics. I also present the results of the regression tests in order to show the differences among demographic groups. Further tables and charts can be found in Appendix E.

The qualitative data from the open-ended survey questions and the interviews are discussed in prose, while the tables created early in the analysis process that include theme and demographics can be seen in Appendices D and E.

### **Frameworks for Discussing the Findings**

In the discussion of the findings in chapter VI, I will return to the theoretical orientation for the study. A Bronfenbrenner (1979; 1993; 1995) map representing faculty members' ecologies will be created; this will help show the factors that influence faculty members' lives. These factors will then be analyzed in terms of how they affect the faculty members' perceptions of and attitudes toward professional development for teaching. Bronfenbrenner's (1979; 1993; 1995) theory inherently calls for a fuller picture of a person's entire ecology, lending itself nicely to the analysis of interview data. This will help determine the ways in which the personal ecologies and meaning making structures of faculty members in higher education affect their perceptions of professional development. Ultimately, an understanding of faculty members' ecologies will help in creating professional development programs that better suit their needs.

## **CHAPTER IV: Survey Findings**

### **Introduction and Road Map**

This chapter explains the details of the sites and participants involved in the study and the major quantitative and qualitative findings from the survey. It also presents the statistical tests and analyses that were performed on the data. The next chapter (chapter V) contains the findings from the qualitative interviews and combines both survey and interview findings together in light of the theoretical framework for the study. Finally, chapter VI describes the implications and takeaways from the overall findings. It also makes suggestions for how these findings can be used in designing faculty development that addresses the preferences and needs of various types of faculty members.

Chapter IV begins with an introduction to the two institutions where the study took place. It provides details about the final survey sample and response rates, while comparing the sample demographics to those of each institution. Chapter V explains details about the eleven participants who were selected for the follow-up interviews.

The findings sections below present the survey data. For the quantitative questions, frequencies and means are reported. Select, representative responses to the qualitative questions are discussed along with the overall themes that they illustrate. Then the statistical tests are outlined along with their major findings in terms of statistically significant differences among groups of respondents.

### **Site Overview and Participants**

As mentioned in chapters I and III, the two institutions where the study took place were each highly-selective, private, research-intensive universities in the northeastern United States.



They are located in close proximity to one another and often compete for students and faculty members. The campuses are both residential, and each institution is comprised of a school of Arts & Sciences along with numerous other professional schools. The number of full-time faculty at each school is similar. Institution B, however, has a slightly stronger focus on research, as evidenced by its Carnegie rating of Research University/Very High Research Activity (RU/VH). Institution A is rated as the level beneath that, Research University/High Research Activity (RU/H). Table 1 outlines the major elements of each institution.

Table 1 Characteristics of Institutions A and B		
	<u>Institution A</u>	<u>Institution B</u>
Number of Undergraduates	9,110	5,130
Total Enrollment	14,400	10,800
Number of Full-time Faculty	757	875
Number of Schools	8	9
Location/Setting	Northeast/suburban	Northeast/suburban
Carnegie Rating	RU/H	RU/VH
Teaching Center on Campus	No	Yes

The survey was sent to all full-time faculty members at each institution. This will be referred to as the sampling frame of the population, as the overall population is full-time faculty members at research universities in the Northeast. At Institution A, the survey was sent twice (the pilot study to three schools, and the final study to four schools), and the results were then combined.

Because these surveys were sent over a year apart, the number of full-time faculty fluctuated; 757 is the official number that Institution A reported in academic year 2013-2014. However, across the two academic years, the survey was sent to 699 full-time faculty at Institution A.

At Institution B, there are numerous medical and professional schools that differ significantly from more traditional schools like Arts & Sciences. The medical and dental

schools, for example, do not have tenure track systems for their faculty members. In addition, schools of this nature tend to have regulated professional development that is often tied to accrediting agencies. For these reasons, I elected not to send the survey to the schools at Institution B that did not have tenured faculty members, as that would make Institutions A and B more comparable. This decreased the sample size to 484 from the original number of 875 full-time faculty members.

The aggregate number of surveys returned at Institution A was 273 out of 699, for a response rate of 39%. At Institution B, 159 out of 484 surveys were returned, for a response rate of 33%. Therefore, the overall response rate for the survey was 36.5% ( $n = 432$ ).

Chapter III explained the process by which participants could opt into a voluntary, follow-up interview after taking the survey. Far more people than expected volunteered to be interviewed. At Institution A, 43 participants agreed to be interviewed, and at Institution B, 37 participants agreed to be interviewed. The interview selection process was described in chapter III. This resulted in seven interview participants from Institution A and four interview participants from Institution B. Table 2 presents the number of participants from each institution, and Table 3 shows the aggregate numbers of participants for the study.

Table 2 Participants by Institution		
	Institution A	Institution B
Population sampling frame	699	484
Sample (n)	273	159
Response Rate	39%	33%
Interview Volunteers	43	37
Interview Participants	7	4

Table 3 Total Participants	
Population sampling frame	1183
Sample (n)	432
Response Rate	36.5%
Number of Interviews	11

### Survey Respondents: Demographics

Before presenting the findings, it is important to describe the demographics and characteristics of the survey and interview participants to determine how closely they represent the population of the sampling frame. The percentages are shown in Table 4 below.

In terms of gender, 193 females and 237 males answered the survey. Only two participants identified as “other.” This was such a small percentage of the overall sampling frame that it did not factor into the overall percentages (<1%), and it was not a statistically significant group. In the statistical tests, cells with fewer than five expected values were suppressed, which therefore dropped these two individuals from the gender analysis. However, they were still part of the data for all other demographic tests.

At Institution A, the full-time faculty is 40% female and 60% male (Institution A 2013-2014 Fact Book, 2013). At Institution B, the full-time faculty is 40.3% female and 59.6% male (Institution B 2013-2014 Fact Book, 2014). As seen in Table 4, the survey respondents were 45% female and 55% male. Though slightly more females answered the survey than are represented in the sampling frame, the difference was not statistically significant. Therefore, the gender representation of the survey population (or sampling frame) closely mirrors the overall population at these two institutions.

Table 4 Gender, Age, and Tenure Status of Sample			
Category	Demographic	Percentage	n
Gender	Male	55%	237
	Female	45%	193
Age Range	Under 40	20%	86
	40-50	27%	116
	51-60	26%	115
	61 and over	27%	115
Tenure Status	Non-track	24%	104
	Tenure track	17%	73
	Tenured	59%	255

As mentioned previously, data on the ages of faculty members are not publically available. Therefore, it is not possible to determine whether the age ranges of the survey respondents accurately reflect those of the sampling frame. However, Table 4 shows that the age breakdown of the respondents is roughly evenly divided among the four categories given on the survey: under 40 (n = 86), ages 40-50 (n = 116), ages 51-60 (n = 115), and over 60 years old (n = 115). Given the traditional faculty demographics discussed in previous chapters, it makes sense that the smallest group is those under 40. Recent changes in faculty hiring patterns and the increased reliance on part-time faculty (Altbach, 2011) would imply that new Ph.D.s are obtaining full-time jobs later in their careers than previous cohorts of graduates. This helps explain why the group of under-40 year old faculty members is slightly smaller than the other age ranges.

At Institution A, 60% of all full-time faculty are tenured, while 16% are on the tenure-track and 23% are not on the tenure track (Institution A 2013-2014 Fact Book, 2013). For the Schools at Institution B that offer tenure (the ones to which this survey was sent), 56.8% of full-time faculty are tenured, 18.7% are on the tenure-track, and 24.5% are not on the tenure track

(Institution B 2013-2014 Fact Book, 2014). Figures 3 and 4 visually represent the tenure status breakdown of the populations at Institution A and Institution B.

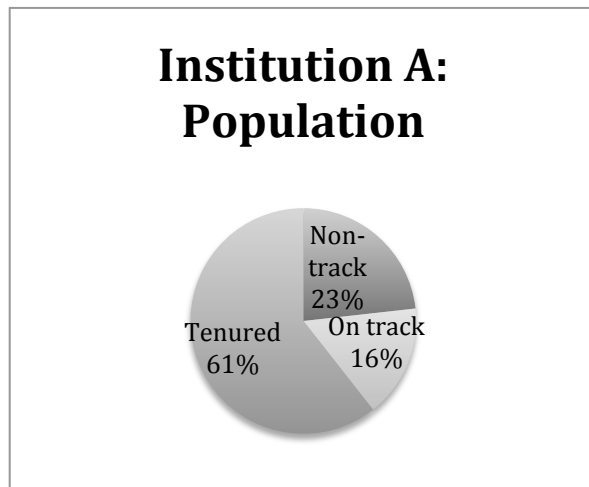


Figure 3. Institution A. Full-time faculty by tenure status.

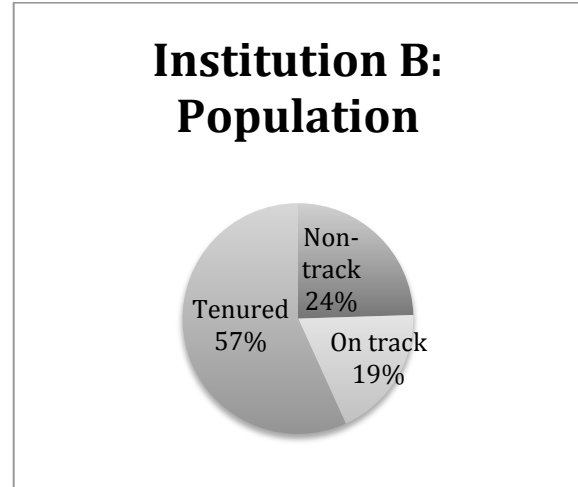


Figure 4. Institution B. Full-time faculty by tenure status.

Table 4 also demonstrates the tenure status breakdown of the survey respondents. Of those who replied, 59% were tenured ( $n = 255$ ), 17% were on the tenure track ( $n = 73$ ), and 24% were not on the tenure track ( $n = 104$ ). A one sample t-test on each tenure group showed that there were no statistically significant differences between the tenure percentages in the sampling frame at each institution and the tenure percentages in the survey sample.

The last demographic area was the respondent's discipline. Though the survey provided a drop-down menu of all departmental options for each institution, these departments/disciplines were collapsed for the data analysis. The three major categories became: science, math, and engineering<sup>3</sup>; social sciences<sup>4</sup>; humanities & interdisciplinary.<sup>5</sup> Figure 5 shows the proportions

<sup>3</sup> Science, math, and engineering: this category contained astronomy, biology, chemistry, computer science, earth/environmental/ocean sciences, engineering, math, nursing, occupational therapy, physical education, and physics.

<sup>4</sup> Social sciences: this category contained anthropology, business, child development, communication, economics, education, political science, psychology, social work, sociology, law, and urban and environmental policy.

<sup>5</sup> Humanities & interdisciplinary: this category contained art & art history, classics, drama & dance, English, fine arts, German, history, music, philosophy, romance languages, Slavic languages, religion, Russian, theater, theology, visual studies.

of survey respondents who fell into each of these three disciplinary categories. Of the total survey respondents, 23% were in the areas of science, math, and engineering ( $n=99$ ), 44% were in the social sciences ( $n=189$ ), and 33% were in the humanities or an interdisciplinary program ( $n=144$ ). Most respondents are in the social sciences category, and part of this could be due to the makeup of the sampling frame. For example, at Institution A, the survey was sent to the professional schools of business, education, law, and social work, which all fell under the social sciences category. Those four schools alone account for 20% ( $143/699$ ) of the people who received the survey invitation at Institution A; this is without factoring in Institution A's other social science departments, such as communication, economics, sociology, etc.

The actual makeup of the disciplines for the sampling frame population is similar to what was found in the survey sample. At Institution A, science, math, and engineering faculty are 21.1% of the population, social sciences faculty are 45.7% of the population, and humanities faculty are 33.2% of the population. At Institution B, science math and engineering faculty make up 37.2% of the population, social science faculty are 26.9%, and humanities faculty make up 35.9% of the population studied. Chi-square tests were conducted to determine whether any of the differences between the population and sample demographics were statistically significant, and it was found that none were.

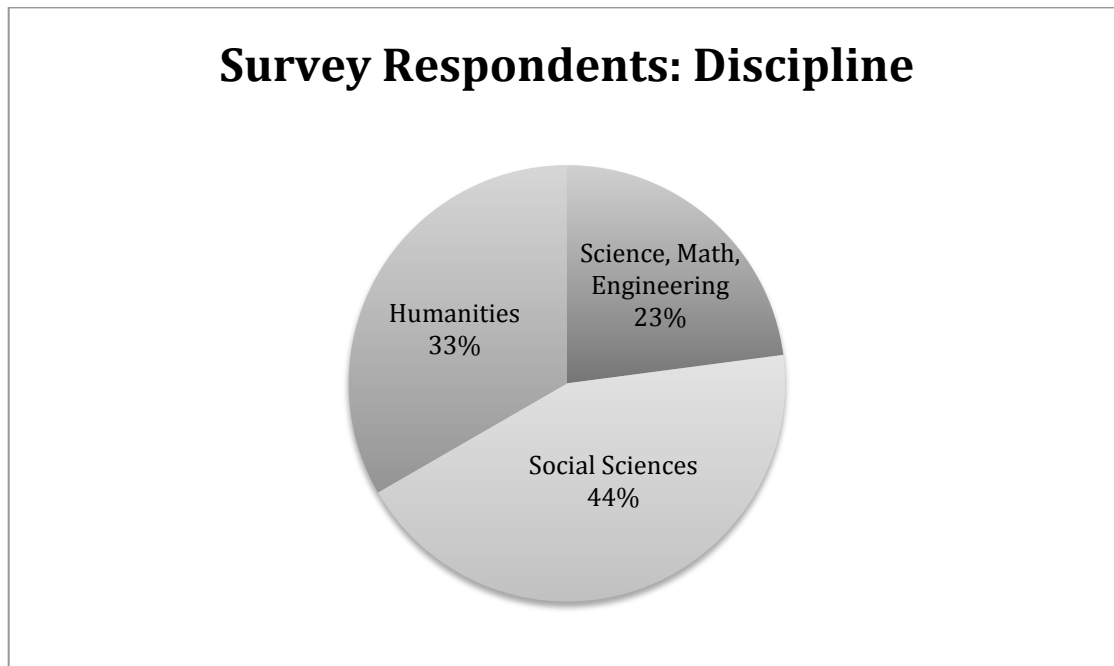


Figure 5. Sample disciplines. Discipline breakdown of survey respondents.

Overall, the demographic makeup of the survey respondents is similar to that of the sampling frame in terms of gender, tenure status, age, and discipline. This indicates that the analysis on these data will accurately reflect the population at each institution. In addition, to test the makeup of the two groups, a chi-square was calculated to see if the demographic information was similar for the two institutions. Table 5 below shows that only discipline was found to be statistically significantly different between the two groups.

Table 5 Chi-square Tests for Demographic Groups		
<u>Demographics</u> <u>*Institution</u>	<u>p-value</u>	<u>Result</u>
Gender	.524	Not Significant
Age	.678	Not Significant
Tenure Status	.441	Not Significant
Discipline	<.001	Significant

A follow-up crosstabs was conducted to see where the differences were within discipline groups. Institution B had more faculty members in the science, math, and engineering group than

expected, and it also had fewer social sciences faculty than expected in the crosstabs. This is in keeping with the fact that Institution B is rated as a more productive research institution, partly due to the fact that it has a robust engineering school. As noted earlier, Institution A has more professional schools that focus on social sciences, which may account for the lower than expected number of social sciences faculty in Institution B. However, these tests once again show that the institutions are, for the most part, comparable in terms of demographics of their faculty members.

Chapter III stated that a power analysis shows that for a two-tailed test with an alpha-level of .05, a sample size of 134 participants is needed from each institution in order to detect a medium-sized (.3) difference between the schools. As noted above, Institution A had 273 respondents, and Institution B had 159 respondents, both of which are greater than the 134 required to detect a medium-sized difference between the institutions. After the survey distribution was completed, another power analysis was conducted to determine the actual power achieved by these sample sizes. The actual power was .85. This means that there was an 85% chance of finding a statistically significant difference if one existed. Generally, a good level of actual power is .8; therefore, this study has a slightly higher power than convention dictates, meaning that it would be possible to detect a smaller effect size than if the actual power were less than .8 (Shavelson, 1996).

### **Survey Findings**

As mentioned in this chapter's introduction, the findings of the survey will be presented first in terms of frequencies and means, along with qualitative answers, for each of the survey



questions. The closed-ended questions will be listed first, with the open-ended questions following. Then the statistical tests will be presented and explained.

### **Closed-ended Questions**

The first survey question was a general question asking whether faculty were aware of professional development on their campus. This demonstrated that the vast majority of those taking the survey, 96.8% (n=418), were indeed aware of professional development activities on campus. The follow up question asked whether they had attended any such sessions on campus; a smaller number, 73.9% (n=320), said they had previously attended professional development, while 26.1% (n=112) had not attended any sessions. Taken together, these answers demonstrate that faculty are highly aware of professional development opportunities offered on their campuses and that the majority of respondents have attended some sort of professional development program on their campus in the past.

The next question asked how likely faculty would be to attend professional development activities in the future, if they were to be widely available. Of the 432 survey participants, 413 answered this question, and the responses were somewhat normally distributed. Figure 6 below demonstrates the scatter plot of the frequencies for the responses. The majority of responses were “4,” or “somewhat likely” (28.3% of respondents). As the line shows, most respondents were clustered between “4” and “5,” or “somewhat likely” to “likely.” The mean for this question, however, was 3.66, just between “undecided” and “somewhat likely,” but closer to the likely side. Overall, these responses show that faculty are somewhat mixed on their likelihood of participation. While the majority is on the “likely” side of undecided (59.8%), 15% of respondents were undecided, and 25.2% said they would not be likely to attend. These results

somewhat contradict the last finding that demonstrated 73.9% of respondents had attended professional development in the past. It could also show that they attended in the past, had a bad experience, and would not attend again in the future.

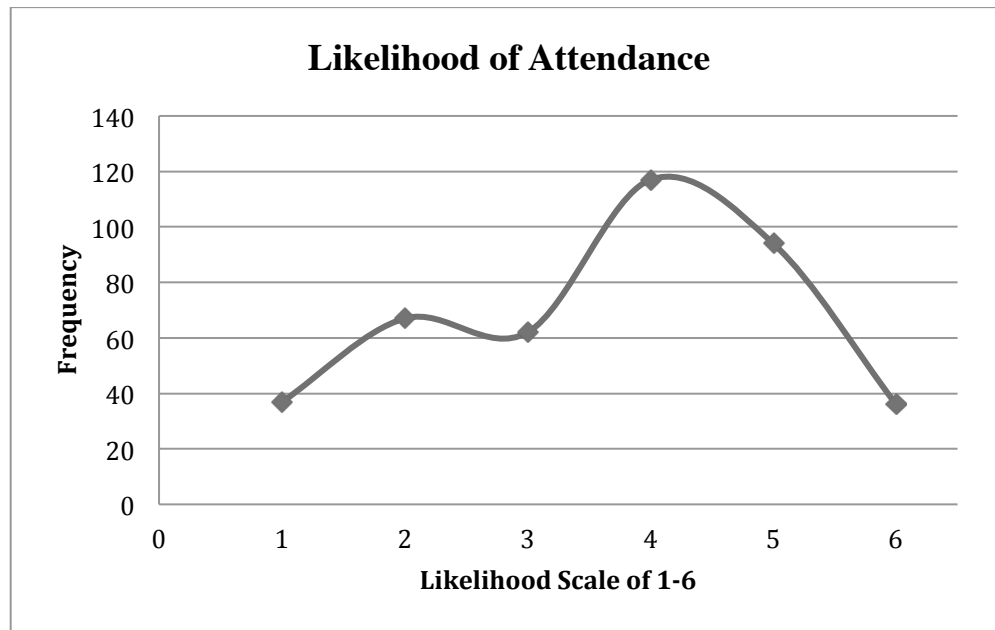


Figure 6. Scatter plot. Response frequency on likelihood question.

Table 6		
Likelihood of Attendance	Frequency	Percent
1-Very Unlikely	37	9.0
2-Unlikely	67	16.2
3-Undecided	62	15.0
4-Somewhat Likely	117	28.3
5-Likely	94	22.8
6-Very Likely	36	8.7
Mean	3.66	
Median	4.00	
Standard Deviation	1.44	

After likelihood of future participation, the survey asked faculty how often they would plan to attend in future if they saw programs that suited their interests. Of the 432 respondents, 409 answered this question. The responses were normally distributed, as Figure 7 below shows,

with the majority of respondents (44%) saying they would prefer to attend professional development once a year. This was followed closely by “once a semester” (40.3%). The two other options, “never” and “once a semester,” had far fewer responses. These results, plus the mean score of 2.47, indicate that most faculty would prefer to go 1-2 times per academic year. A small percentage of respondents, however, would never plan to attend, while an even smaller percent would want to participate in professional development once a month.

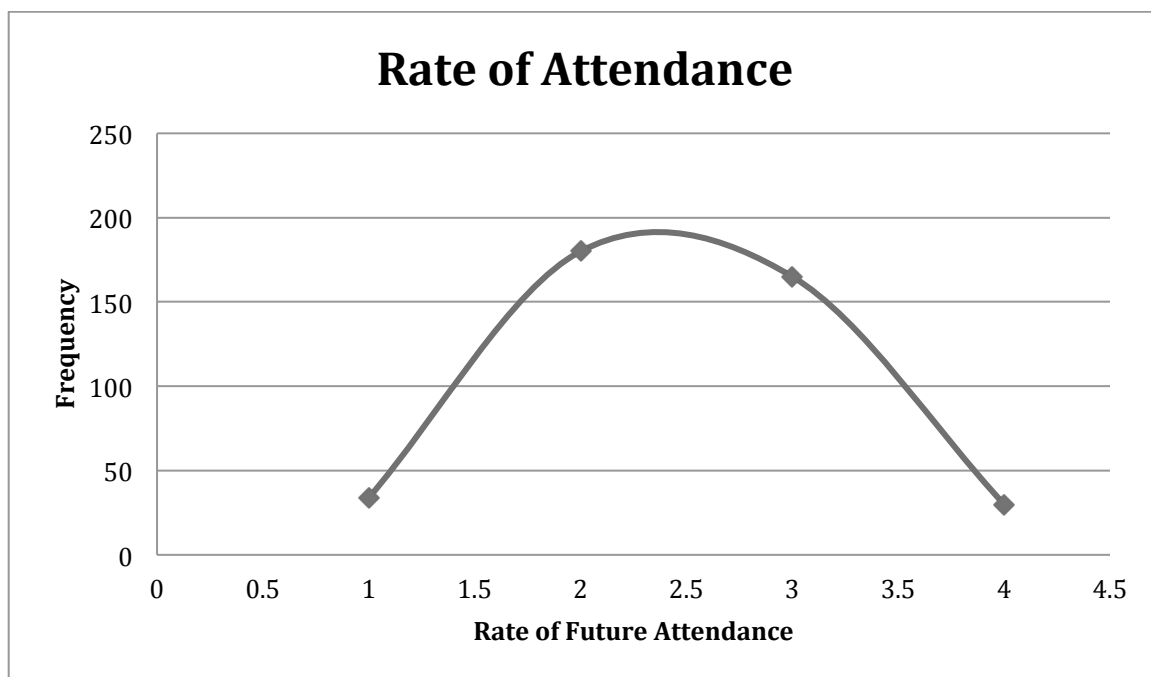


Figure 7. Scatter plot. Response frequency on rate of attendance question.

Table 7		
Rate of Attendance	Frequency	Percent
1-Never	34	8.3
2-Once a Year	180	44.0
3-Once a Semester	165	40.3
4-Once a Month	30	7.3
Mean	2.47	
Median	2.00	
Standard Deviation	0.75	

Taken together, the results demonstrate that faculty have somewhat mixed opinions on how likely they would be to participate in professional development activities in the future, though the majority said they would be somewhat likely. If they do participate in future, however, they would be most likely to participate once or twice a year.

Next, faculty were asked to select their preferred format for professional development activities, and they could select as many formats as they wanted. Figure 8 shows that the most popular type of program that faculty would want to attend would be technology training. This is in keeping with other qualitative responses to the survey, which will be discussed below. The second and third most popular types of programs were hands-on tutorials and lectures/seminars, followed closely by collaboration opportunities with other faculty members. The rest of the options all received less than 10% of the responses. Technology training, which could be considered hands-on in most cases, and hands-on tutorials themselves, together account for almost 30% of all responses, showing that many faculty members would prefer active learning opportunities as opposed to lectures and seminars. The least popular choice was midterm feedback sessions, which is when students are surveyed to determine how well the instructor is facilitating their learning. It is important to note that this practice is not a robust and well-advertised program at Institution A, while it is fairly popular at Institution B; this could account for the low selection rate if faculty at Institution A are not aware of this type of program.

Overall, however, faculty appear to prefer hands-on sessions that would provide them with the chance to collaborate with other faculty. This sentiment will also be echoed in the interview data discussed in the next chapter. Though cohort-based groups and learning communities also foster collaboration among colleagues, it is possible that these terms were unfamiliar to faculty who are less involved in professional development. They might not know

what these types of programs would entail. Once again, this is especially true at Institution A, where faculty learning communities do not yet exist.

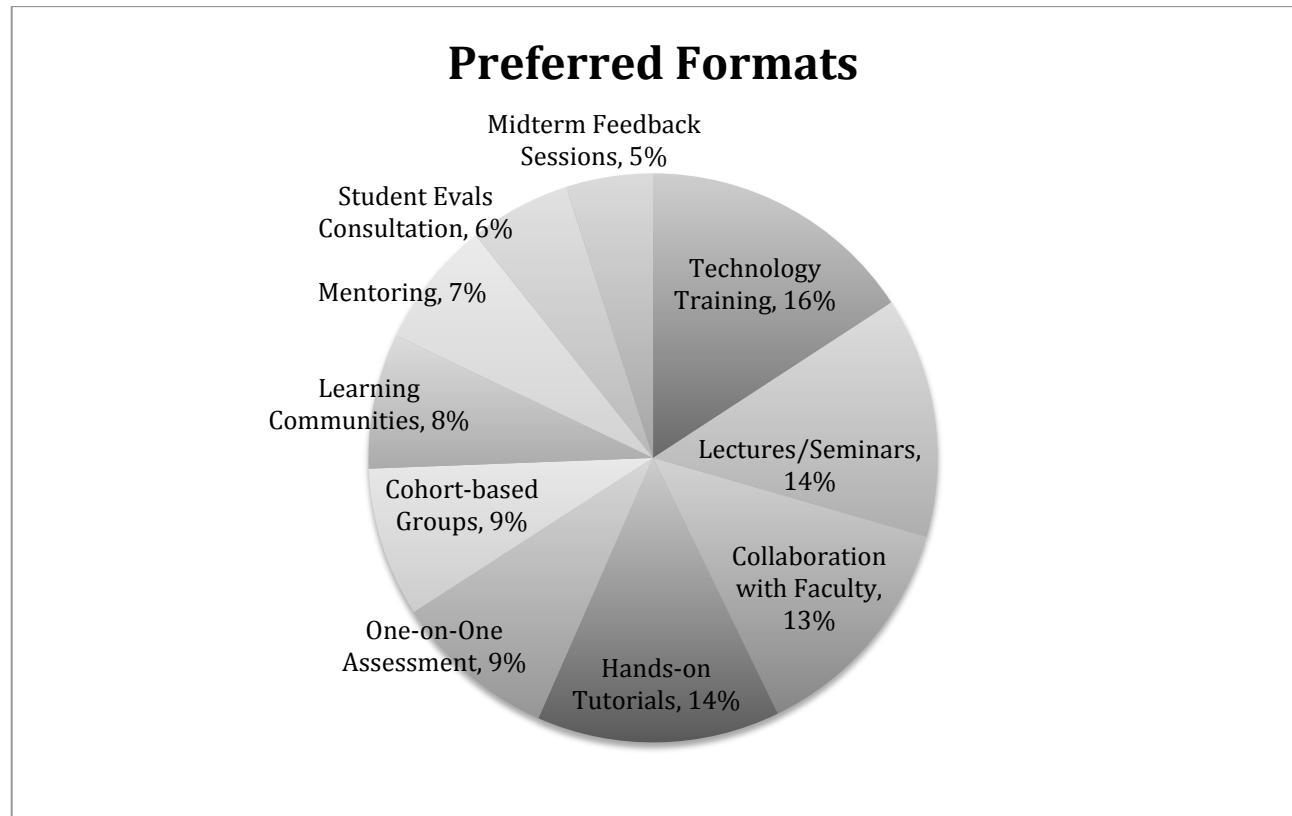


Figure 8. Preferred PD Formats. Pie chart of responses.

Faculty were also asked about what topics they would prefer to see offered for professional development. Table 8 below shows the distribution of program topics that faculty would find most useful for their teaching. The top category was new pedagogical practices, followed closely by technology-based programs. That mimics the results seen in the last question, where faculty selected technology training as their top choice. Discussion techniques were the third most popular, followed by E-teaching, which is a more specialized area of technology usage. The flipped classroom model could also be considered a means of using technology in the classroom; when it is combined with technology and e-teaching under the

umbrella of “using technology,” the three categories together would become the most popular (23.65%), demonstrating just how eager faculty are to learn about using technology in the classroom.

While faculty did select other topics they would like to see offered, like course design, cognitive development, and integrating various teaching techniques, all other topic selections paled in comparison to the top four. The least popular topics tended to do with classroom management, such as managing large classes, handling difficult situations, and working with teaching assistants. This would imply that faculty believe they need less assistance in these areas.

Table 8 Preferred Topics	Percent
New pedagogical practices	10.1
Using technology	9.5
Discussion techniques	8.8
E-teaching	8.1
Course design	6.8
Cognitive development	6.4
Integrating teaching techniques	6.1
Flipped classroom	6.1
Lecturing techniques	5.9
Working with diverse populations	5.3
Reflective teaching	5.2
Handling difficult situations	5.1
Grading and giving feedback	4.2
Using teaching assistants	4.0
Handling large classes	4.0
Classroom management	2.5
E-portfolios	2.0

The next two survey questions asked about the importance of professional development and its perceived usefulness to the respondents. In terms of importance, most faculty believed that “great” or “some” importance should be placed on professional development for teaching

(combined percentage 87.9%). Only 4% of the participants felt that little importance should be given to professional development. Over half the faculty surveyed, 53.6%, felt that professional development programs would be useful for their teaching, while just 6.2% found it to be useless. Taken together, the responses in Table 9 jointly demonstrate that the majority of faculty members believe that professional development is important and useful.

Table 9 Importance and Usefulness	Frequency	Percent
1-Great Importance	171	42.1
2-Some Importance	186	45.8
3-Neutral	33	8.1
4-Little Importance	10	2.5
5-Very Little Importance	6	1.5
n	406	
Mean	1.75	
Median	2.00	
Standard Deviation	0.82	
1-Very Useful	77	19.0
2-Useful	217	53.6
3-Neutral	86	21.2
4-Useless	16	4.0
5-Very Useless	9	2.2
n	405	
Mean	2.17	
Median	2.00	
Standard Deviation	0.86	

Interestingly, these two questions showed a difference in the percentage of faculty who answered “neutral.” A larger percentage of faculty were neutral about the usefulness of professional development, as opposed to just 8.1% who were neutral about its importance; this could be due to less exposure to such programs, meaning that respondents were not comfortable in evaluating the usefulness without sufficient experience. It also could be due to the variability in the usefulness of programming. Qualitative survey answers showed that faculty found some

programs very useful, and some less useful, which could have led to their neutrality on this question. It is also interesting to compare these responses with those on the likelihood of attendance question. Faculty find professional development useful and important, but they are mixed about how likely they would be to attend sessions in the future. This presents a paradox that will be discussed in further detail in the next chapter.

Faculty were asked to evaluate their confidence in their teaching and the teaching training that they received while in graduate school. These two 0 to 100-point scale questions differ greatly in their means and variability, as shown in Table 10. Overall, they show that faculty are very confident in their teaching abilities, with a mean score of 82.04 over 351 responses. However, faculty have had very little teaching training during their time in graduate school, with a mean score of 29.38 for 347 respondents. The standard deviation in confidence was just 12.77; when graphing these responses on a scatter plot, they were all densely compacted towards the high end of the range. Standard deviation for teaching training was greater, however (31.53), meaning that there was more variation in the amount of teaching training these faculty members received in graduate school. Overall, teaching training was on the low end of the 100 point range, while confidence was high.

Though these findings will be tested later in this chapter for associations, it is interesting to note that most people felt extremely confident in their teaching despite having very little training as a teacher before starting their jobs. This presents yet another paradox in the survey findings.

Table 10 Confidence and Teaching Training	
Confidence	
Range	0-100
Mean	82.04
Median	85.00



Standard Deviation	12.77
n	351
Teaching Training	
Range	0-100
Mean	29.38
Median	19.00
Standard Deviation	31.53
n	247

Note. Confidence scale, 100 = “extremely confident.”  
Teaching training scale, 100 = “significant teaching training.”

The last two closed-ended survey questions asked participants about the importance placed on teaching development at their own institutions, along with how involved they felt an institution should be in promoting professional development on campus. The responses in Table 11 below demonstrate that faculty are split on whether teaching development is underemphasized or properly emphasized at their institutions. Only 5.8% of respondents found it to be overemphasized.

Overall, faculty believe an institution should be either extremely or somewhat involved in promoting professional development (93.3%). Taken together, these results show that almost all faculty want their institutions to be at least somewhat involved in promoting teaching development on campus. They currently perceive their institutions to be appropriately emphasizing its role, though a large percentage of faculty respondents would appreciate more emphasis on teaching development. These findings corroborate the survey’s previous findings that faculty think professional development for teaching is important. They want institutions to be involved in promoting it on campus because they find it useful and valuable.

Table 11		
Emphasis and Involvement	Frequency	Percent
Emphasis		
1-Underemphasized	175	44.0
2-Right amount of emphasis	200	50.3
3-Overemphasized	23	5.8
n	398	
Mean	1.62	
Median	2.00	
Standard Deviation	0.59	
Involvement		
1-Extremely involved	179	44.6
2-Somewhat involved	195	48.6
3-Neutral	24	6.0
4-Not involved	3	0.7
n	401	
Mean	1.63	
Median	2.00	
Standard Deviation	0.63	

The next section will describe the responses on the open-ended survey questions. The overall themes that were pulled from the data will be presented along with select quotes that illustrate the themes.

### Open-ended Questions

**Types of programs attended and their usefulness.** Faculty were asked what kinds of programs they have attended in the past, why they chose to participate, and how useful they found it. Of the 389 responses, most people said that they had attended technology training or workshops. These included e-teaching days, PowerPoint workshops, and sessions on using iPads, clickers, and learning management systems. While people found these types of programs interesting, their thoughts on the utility of such sessions varied. For example, one respondent said, “I have attended workshops on the use of technology in the classroom. I have adopted and

used effectively some of the advancements I learned about in these workshops in my course.”

However, another participant found that, “I have not used it much because the technology seems to be changing constantly.”

Besides technology training, faculty have also attended workshops on grading, working with different groups of students, course design, and Writing Across the Curriculum. Overall, survey participants found these types of workshops, which usually provided lunch, to be quite useful. The only negative was that sometimes these sessions contained information that faculty already knew. More than other types of programming, however, these workshops promoted collaboration, which the survey and interview data showed was a major factor in faculty deciding to attend. One respondent at Institution B said, “I attended a workshop whose aim was to help faculty redesign and improve a course. This was very useful as I was able to figure out new ways to teach a course I had been teaching for a long time, mostly because the other participants were from different disciplines, and that gave me a broader view of my course.” This type of program is useful in building collegiality across departments.

Other respondents had previously participated in microteaching workshops and in-person and video teaching evaluations. The ones who had taken part in these found that one-on-one consultations with a professional development facilitator were very useful for receiving feedback on their teaching. Still others had attended lectures on various topics such as rubrics, interpreting evaluations, and academic misconduct; while participants said these were useful, these sessions also contained a significant amount of information that faculty already knew.

Lastly, a few respondents noted that they had attended school-specific professional development programs. This was found to be especially true in the business and nursing schools at Institution A. One participant said, “[I have attended] some within my school whereby

colleagues share teaching methods. These are helpful and build collegiality.” Once again, faculty demonstrated that collaboration and working with others is a main goal in attending professional development. Even when the actual utility of the program was low, faculty replied that the sessions “provided opportunities to meet and learn from colleagues across campus” and “builds a sense of team with my colleagues, hearing about their experiences is so helpful.” One respondent even said, “Nothing palpable came from these workshops. Interacting with faculty in other disciplines became the point.” The theme of collaboration and collegiality will be discussed further in the interview findings in the next chapter.

Many respondents said that they found programming to be very useful. Responses included, “I have found everything I have been able to attend very helpful, including both small but very useful tips, to bigger ideas” and “I find that they provided some thought-provoking ideas, some of which I try to incorporate into my own teaching.” A smaller number of survey respondents said that programming was not as useful as they had hoped. Some were harsher about their criticism than others. One faculty member said, “It certainly helped me think more about teaching writing and gave me ideas for tackling certain problems/concepts, but maybe nothing more than I would have gotten out of talking to more experienced colleagues,” while another, more extreme answer was, “Sitting around and talking about [teaching] was absolutely useless.” A few faculty were in the middle: “I chose to participate because I thought they would be of use. Sometimes they are, and sometimes they are not.”

Overall, participants seemed to find programs varied in utility, specifically in terms of workshops and lectures, which were sometimes repetitive. Faculty were often happy if the workshops included free food, however. This is another finding that will be repeated in the qualitative interviews. School-specific teaching programs were most common in professional

schools, like Nursing and Business, and they helped build collegiality; very few other departments or schools appeared to offer such programming. Survey respondents found programs most useful when they built collegiality, gave them a broader view of their own work, or provided them with some practical, hands-on skills that they could bring back to the classroom, especially in the area of technology. However, for those who found programming not as useful as they had hoped, it was often due to lack of concrete strategies offered by the facilitator of the program or the fact that the program was not immediately applicable to that faculty member's situation.

**Why faculty have not participated in the past.** The survey logic included an additional question for faculty who replied that they had never participated in any form of professional development programs in the past. This was designed to gather information from a population that is not often heard from in the existing literature. Of the 432 survey respondents, 90 people answered this question.

The top reason for faculty electing not to participate in any professional development programs is time. They are often overloaded, trying to attend to competing demands, and unable to balance their multiple roles as scholars, researchers, and teachers, as well as collegial members of the university. This concept will be addressed more fully in chapter VI, as it relates to Bronfenbrenner's (1979; 1993; 1995) ecological systems theory. Some faculty provided short, to-the-point responses, such as, "Not enough time!" and "Too many other duties (aside from teaching, research, writing grants, papers, working with students, etc.)." Some faculty pointed out that not only is there a lack of time, there is a lack of financial remuneration for attending, another theme that will be discussed further in the next chapter. Other faculty noted that their research is more important: "I'm very busy with research. I don't know too much about the

teaching workshops. I haven't heard colleagues praise them or even talk about using them."

However, it also sounds as if there may be an issue with communication or advertising the programs. One faculty member concisely summed up the issues that others also face:

I have information overload. I have enough to keep track of staying abreast of my academic field, the demands of teaching, and the demands of the University regarding what seems like the endless tasks of administration of my program and department, that I can't spend my time on projects dreamed up by others to pad their own résumés. I apologize for my cynicism but over the past two decades this university has become an increasingly impossible place to work. There is no longer any time to pursue research and teaching, two domains that used to be valued here. If others have found it manageable, my hat is off to them.

The second most common response was that the faculty believed they did not need to attend because they felt they were already competent teachers. Many of them cited their strong teaching evaluations as evidence: "Based on the reviews of colleagues and students, I believe my teaching is very good to excellent." Others cited their years of experience: "I am an experienced teacher - if I felt I was not engaging students or they were not learning I seek new ways of engaging them." Another respondent said, "I know more about teaching in my fields after 40 years working in 5 countries and a multitude of departments and disciplines than I need for present and future purposes." Yet another replied, "[I am] confident that my teaching is 'good enough' already. I don't like seminars and meetings. With 30+ years of teaching experience, I figure I know what I am doing." Some faculty simply said they did not see the

need and had no reason to go, while others were more self-deprecating with, “You can't teach an old horse new tricks.” Many faculty respondents expressed a belief that they would know more than any program could teach them.

Other reasons for non-attendance related to deep-seated prior beliefs that the faculty members held. For example, they often believed programs were not effective, were not relevant to their teaching, or not interesting: “I don't believe they are effective,” and “Skepticism about their usefulness (and about the expertise of the ‘teaching’ professionals).” The latter comment also came up in the interviews and will be discussed further in the next chapter. Those who found the sessions not relevant said that they were not designed for the humanities, or not designed for the sciences, or not designed for faculty teaching graduate students. These (somewhat contradictory) responses are listed in Appendix E. Some faculty also cited their own lack of motivation, often stating that they would need a reward to entice them to attend: “Lack of reward - I would be doing it only for myself.”

Lastly, a small number of faculty referenced scheduling conflicts, which relates to lack of time but is more specific. It also shows that they are paying attention to the offerings on campus, but may not be able to attend despite wanting to. This is especially true for nursing faculty who said that, “Many nursing faculty are required to make visits to clinical sites that often conflict with any activities physically on campus.”

Overall, these responses showed that time and prior beliefs were the main reasons for faculty not attending professional development. While it is not possible to change the number of hours in a day, it may be possible for institutions to re-shape the beliefs of faculty who feel professional development is beneath them, not useful, or not rewarding. Some suggestions on how to do this will be presented in the final chapter.

**Why faculty would not participate in the future.** The survey logic also had an additional question for faculty who replied that they would not elect to participate in any kind of professional development in the future. Though the responses are somewhat similar to the ones discussed above, these are from a slightly different population that appear even more critical of professional development; some of these respondents have gone in the past and are basing their answers on their previous experience. Despite the small number ( $n = 33$ ), these are some of the most important answers on the survey in that they can help determine why some people are opposed to professional development.

Three of the themes here mimic the ones from the last question, namely, that professional development is not useful, that the respondent does not need it, and that they do not have the time to attend. Interestingly, lack of time was the least common response here, whereas it was the most common response in the previous section.

Faculty members expressed doubt that development programs would be useful for them. They replied, “From my past experiences, there is usually little to gain by [going],” and “I have no evidence that attendance would improve my teaching.” They also demonstrated a conceit (sometimes self-admitted!) in their teaching ability that leads them to believe they do not need to attend. As with the previous section, faculty said they are already excellent teachers and that they get strong teaching evaluations already. One faculty member said, “At this point in my career, I have the conceit that there is not much more that I need to know. One exception might be in the areas involving computers and other ‘electronic’ means.” Another said, “My teaching has developed pragmatically from my period as a graduate student, and by the age of 72 I have more experience in the classroom than anyone who could teach me.” These responses are



similar to those in the last section, where faculty, especially those with more years of teaching experience, do not believe they can gain anything from attending professional development.

A new theme that developed from this group of responses is that more effective means of teaching development exist for certain faculty. They said that talking to their colleagues, observing other teachers, and practicing their craft would be more effective than attending professional development: “I find that talking to colleagues about specific issues, asking students more questions, paying attention to mistakes in students’ answers in class, homework and exams is a much better way of improving my teaching.” Another faculty member said:

I think one becomes a better teacher by just teaching more, and getting feedback from your students. In my experience, it’s not really effective to attend events where people sit around and talk about what works and what doesn’t, what’s ‘correct’ and what isn’t. You only become better by just doing.

A few faculty mentioned that they talked about issues of teaching within their departments or schools, and that was often more helpful than formal professional development. This theme will emerge further in chapter V, though it was a somewhat surprising new find on the survey, as it did not appear in the pilot study.

### **How involved an institution should be in promoting professional development.**

Though there was a closed-ended question that asked faculty to select the level of involvement they believed their institution should have, this open-ended, follow-up question asked them to explain their thoughts. Of the 432 respondents, 327 provided an answer. The major themes and some examples will be given below, but further responses can be found in Appendix E.

The most common theme was that teaching should be highly valued on campus because educating students is the core mission of the university. Many faculty expressed their feelings that undergraduate teaching is often neglected, and they recognized that students' tuition dollars fund their salaries. They believed it was the duty of faculty to strive to be good teachers in order to deliver a good product (teaching) to their consumers (students): "Students are our consumers. If we don't do an excellent job in the classroom, we are cheating them out of a quality education." Here, many respondents pointed out the fact that faculty teaching can and should be improved:

Although this institution prides itself for its research, its main business is educating students. Students deserve teachers who are well prepared to utilize a variety of techniques to engage their intellect and imaginations and passions. Good teaching is learned; just because a person knows a lot does not mean that he/she can teach it effectively.

Some faculty were even harsher critics of their institutions, saying that, "I think teaching is one of our major missions and that more emphasis should be placed on improving faculty teaching skills especially in light of the fact that many faculty come to academia with little or no professional teaching experience." They pointed out that teaching should be emphasized by the administration: "Teaching and education are the purpose of a university. Of course the university should promote it – that's the product the university offers, isn't it?" and "Teaching - and the development of teaching - should be the institution's highest priority." Overall, faculty

felt that institutions should care about teaching and should work harder to value and promote good teaching.

The next most common themes showed that faculty wanted their institution to clearly communicate the importance of teaching on campus without being heavy-handed in dictating faculty attendance at professional development. Most respondents believed that the facilities and programming should be available for faculty to work on teaching skills, especially if their employer finds it important, but they should not be required to attend. They would prefer that the administration take a balanced approach: “Extreme involvement need not mean aggressive marketing or pressure to participate, but strong communication about the value and about the opportunities offered.” If the institution clearly showed that it valued teaching, people might be more likely to attend professional development. One faculty member said, “I think that if faculty believed that the institution valued teaching, supported teaching, and most importantly, rewarded teaching, then we’d be happy to put more energy into teaching.” Faculty believe that requiring involvement in professional development would make them skeptical and lead to feelings of harassment: “I think the university should make opportunities for professional development for faculty teaching available, but then step back. If the university is over involved, it may make these opportunities seem required, which would lead to faculty doing them for the wrong reasons.” While they do not want the administration to become over-involved, they would like to see them doing more to promote teaching development: “Though I would want to restrict unsolicited administrative access to the classroom, I do believe that most universities do too little to help their faculty develop effective teaching practices. The result is a lot of courses with less-than-effective teaching.” Ultimately, faculty feel that administrations need to strike a delicate

balance in which they are involved in promoting teaching development but do not make faculty feel as if they are requiring it.

Many respondents also brought up the fact that they would like incentives to attend professional development. Some would like monetary incentives, or even just funding to attend events, while others would like course-release time in order to work on their teaching skills. One faculty respondent suggested:

I think a lot of the promotion of teaching development is somewhat misguided--yes, it's important, and yes, it should happen, but it should be approached with an awareness that a) faculty don't have a lot of time, and b) they'd like to be better teachers but in the end it's not how they're judged against their peers. Offering monetary incentives for participation in PD is nice, but offering time off from teaching (perversely) would be a better incentive.

Incentives were also intertwined with a discourse on promotion and tenure structures; faculty felt that good teaching was not rewarded in their promotion and tenure. As a result, they no pressure or incentive to improve their teaching. Ultimately, this also related to the way in which their teaching is evaluated (when it is), which is via student evaluations. Faculty brought up the argument that less weight should be given to student evaluations because they felt that students rated teachers highly simply because they were easy, not because they were effective in the classroom.

Many respondents highlighted the fact that they feel only research is rewarded at their institutions. Some said, "We say we are concerned with teaching but the emphasis and 'rewards'

seem directed to scholarship,” and “Good teaching should be encouraged and rewarded, though it often isn't at research universities.” One respondent said:

To really promote it, the administration should link it to rewards. The truth is, however, they SAY they like it but -- in my university location however -- only reward publications. Teaching evaluations don't even matter much (unless they want to get rid of someone; then they are suddenly important). We've been told quite explicitly that merit pay is ONLY for publications. So much for the mission of teaching at this institution. I still try to learn about teaching, use technology, etc. It takes a lot of time, but the administration simply does not care.

Ultimately, faculty are not receiving messages from their administrations that teaching is important. Incentives, promotion and tenure expectations, and reliance on course evaluations were all intertwined in the responses from many faculty regarding how they would want an administration to treat teaching development on campus. These are the exosystem factors via which institutions can have an impact on faculty perceptions of teaching, which will be discussed further in chapter VI.

Some respondents said that teaching development helped build community on campus and can be seen as a benefit to everyone. One respondent said, “Creating opportunities for teachers at all levels promotes a sense of shared commitment to students and professional development among colleagues.” Others said there were particular groups of faculty that could benefit from professional development: “Everyone, not just lecturers, should attend professional development workshops to improve teaching. Some older tenured professors have much to learn

regarding teaching.” They spoke about creating a faculty climate that would support quality teaching; this is similar to the messages from the institution that would also serve to foster a climate in support of teaching development.

Lastly, many people noted the fact that there is often no teaching training in doctoral programs. They acknowledged the fact that most new professors arrive on campus with little to no teaching experience and are expected to go into the classroom and know what they are doing. A few people suggested that mentoring could help with this: “Some professors leave graduate school without any teaching experience or teacher training. Senior faculty should be more involved as teaching mentors.” Other people suggested that professional development could be a way to remedy this issue: “If a university expects high-quality teaching, then it needs to train its staff in teaching, since faculty are rarely trained to teach in grad school. It’s as simple as that.” They were often critical of research universities in particular, since that is where most faculty members received their doctoral training. One respondent said, “It is a joke: most people begin teaching college with no practice, no observation -- it is assumed that they will ‘get it.’” The theme of lack of preparation in graduate school becomes one of the most prevalent topics in the qualitative interviews. It will be discussed further in chapter V.

**Additional thoughts.** The final question on the survey asked faculty about their additional thoughts on professional development for teaching. Four major themes emerged in the 128 responses; some echoed previous responses and some were new.

***Not enough time to attend programs.*** Though this was a prevalent theme in the survey data thus far, respondents repeated it again on the final question. They said that professional development is a lofty goal that might not fit in with the realities of faculty members’ busy lifestyles: “It’s just the time factor! SO many demands on my time, as a scholar, teacher,

department member, mentor, committee member, member of my profession, editor, colleague-- not to mention mother/daughter/friend/wife. Just not enough hours in the day!” Others had concrete suggestions of how to ameliorate the issue: “We need dedicated time for this; instead of faculty meetings, for example. The demands for research and service in addition to teaching make it extremely difficult to clear the time to participate.” This is similar to a suggestion above where the respondent suggested giving course-release time in order to people to work on professional development.

***Reward structure is unclear and does not emphasize teaching and its development.***

Once again, faculty said that they feel like they are not encouraged or rewarded for trying to improve the way they teach: “If I want to do a new class or do an old class differently, we get no time to do this work along with our other work. We are better off writing another paper instead of improving our teaching.” Faculty also talked about the fact that they receive mixed messages from the institution. They feel that the institution should be clearer about the weight placed on teaching in annual reviews, promotion, and tenure:

We get mixed messages about the importance of teaching. The balance of our work is supposed to be 40% research, 40% teaching, 20% service. But in our yearly evaluations, it seems clear that teaching counts for little. I think many faculty would pay more attention to teaching, and take professional development more seriously, if the administration made it clearer that it valued teaching and that faculty will see some payoff from the investment in time if they do professional development activities.

Respondents implied that their institutions paid “lip service” to the idea of valuing teaching, but in reality, they felt that research was more valued.

***Concern over who is in charge of faculty development.*** Another common theme was the quality and applicability of professional development. Faculty were concerned about who would be running events: “The danger lies in who would be staffing this charge.” Many of them noted that professional development programs can not be developed or offered with a one-size-fits-all strategy: “I think the issues are different for experienced teachers than for new faculty. Don’t try to come up with a ‘one size fits all’ strategy, since that is boring for everyone involved.” Faculty echoed the sentiment from earlier questions about utility by saying that different disciplines and different demographics have different needs. Professional development facilitators should take this into consideration when planning programs.

***Support for teaching varies by school and department; departments should have more responsibility.*** This was a new theme that emerged from the last question’s responses. As some faculty noted earlier, “The amount of support varies dramatically between different departments and schools on campus. Some schools are VERY supportive and give lots of help. Others downplay the importance of teaching in favor of research.” This was especially true of the professional schools, a theme that will be discussed further in the next chapter. However, this was the first time that faculty suggested that teaching development should be handled on the departmental level. This would allow topics to be more applicable to specific disciplines. One respondent said, “I think that faculty meetings should be at least partially devoted to questions and concerns about teaching--lecturing, grading, etc. Maybe chairs must be encouraged or incentivized to designate faculty meetings for this purpose?” Others suggested that mentoring



junior faculty is “key,” and departments should have a responsibility to ensure their faculty are promoting good teaching, especially with the newer members.

Overall, faculty raised many of the same issues they expressed in to previous questions: lack of time, lack of value by the institution, and concern for how professional development is run. Faculty also noted that the administrations often send mixed messages about the value of teaching; they say it is important, but then it is not taken into consideration in hiring, promotion, and tenure.

### **Conclusion of Survey Data**

The survey data provided many findings and themes that can be investigated further in statistical tests and triangulated with qualitative interviews. Most notably, the data showed that the majority of faculty members surveyed are aware of professional development and have attended in the past. While many of them say it is important and they would want to attend 1-2 times per academic year, they were less positive about their likelihood of future attendance. Their views are, for the most part, positive; they appear to find it useful and important, and they believe an institution should be involved in promoting it. The format they would prefer is anything that involves hands-on training and collaboration with their peers, while the most popular topics are new pedagogical techniques, discussion techniques, and anything related to technology. Most faculty are highly confident in their teaching, while they admit that they had very little teaching training in graduate school.

Following these findings, the statistical tests described below will examine whether past and potential future attendance varies by demographic group or institution. Though the descriptive findings illustrate the average beliefs of faculty in terms of utility and importance of

professional development, the tests will also look at whether these vary by demographic group or institution.

The themes from the open-ended responses will be used when analyzing qualitative interview data, as they help provide initial codes that also correlate with the codes from the interview pilot. These findings will be presented in chapter V.

### **Statistical Tests**

The previous section presented the data and findings for both the open and closed ended survey questions. The closed-ended responses were discussed with their frequencies, percentages, means, medians, and standard deviations. This section explains the statistical tests that were performed on the data following the methods described in chapter III. It also discusses the results and significant findings, relating these back to each demographic group.

### **Chi-square Tests**

Chapter III outlined which tests would be performed on which data. For dichotomous, categorical (yes/no) questions, such as awareness and previous attendance, chi-square tests were performed. Chi-squares were also used on the closed-ended questions with multiple categorical responses, such as likelihood of attendance, frequency of attendance, usefulness, importance place on teaching, and institutional involvement. All tests accepted a p-value of .05 in determining whether a result is statistically significant.

A chi-square test was calculated for the questions about awareness and past participation in professional development. The dependent variables were run by the independent variables of gender, age, tenure status, discipline, and institution. For awareness, none of these tests was

found to be significant, meaning that all demographics did not play a significant role in whether faculty knew about programs that were offered on campus.

However, in terms of previous participation, chi-square tests showed that gender was the only demographic variable that was statistically significant in determining the likelihood of having attended professional development programs in the past. Women were more likely than men to say they had previously participated ( $\chi^2 = 19.676$ ,  $df = 2$ ,  $p < .001$ ).

It is interesting to note that there was no significant difference between faculty at Institution A and Institution B in terms of attendance. Institution B, as noted in the introduction to the sites, has a fairly well-established teaching center on campus. It offers numerous different formats and types of faculty development programming on a regular basis. Institution A, at the time this survey was administered, did not have a teaching center on campus. It offered far less professional development programming. Despite the difference in organized, campus-wide programming aimed at teaching development, there was still no difference in faculty members' attendance between institutions. This may indicate that the faculty members at the two institutions are extremely similar, since institution appears to play no role in attendance or awareness.

Chi-square tests were calculated on the survey questions that had multiple options for responses in order to test the differences in actual versus expected frequencies for each demographic group. The first set of chi-squares was conducted on the question about likelihood of future attendance. This question had a 5-point scale, ranging from very likely to not likely. There were two significant findings: gender ( $\chi^2 = 14.666$ ,  $df = 5$ ,  $p = .012$ ) and tenure status ( $\chi^2 = 22.992$ ,  $df = 10$ ,  $p = .011$ ). Echoing the result in the chi-square above, females were statistically significantly more likely to say they would attend professional development

programming in the future. In addition, non-tenure track faculty were also more likely to say they would attend.

To further confirm these findings, a Kruskal-Wallis test was completed. This test, which is used for non-parametric data, shows whether or not there are significant findings within the group. Then, if differences exist, a Mann Whitney post hoc test can be run to see where these differences occur. For this survey question, females were much more likely than expected to say they would be very likely to attend (standardized residual of 2.4). Males were far less likely than expected to say they were very likely to attend (standard residual of -2.2). Women were less likely to say that they were not likely to attend, while men were more apt to answer with this response. These findings are in keeping with the tests performed on Question #4 above, which demonstrated that females are statistically significantly more likely than males to have attended professional development.

In terms of tenure status, non-tenure track faculty members were less likely than tenured and tenure-track faculty to be “undecided” about their future participation (standard residual of -2.3) and far more likely than expected to say they are “very likely” to attend (standard residual of 2.5). A possible explanation for the non-tenure track faculty members wanting to attend these programs in the future is because they know that their main role at the university is to teach. They also might be looking to achieve a tenure track job at the institution, and they might believe that attendance at professional development could enhance their skills or perceived commitment to teaching, which could ultimately lead to a tenure-track job. In many cases, these faculty members are in the most tenuous employment situation, and making connections and attending events at the university might be a way for them to improve their job prospects.

Chi-squares were also calculated to test demographic groups by how often they said they would participate in professional development programs on campus. This question had a 4-point response scale, ranging from “once a month” to “never.” Once again, only gender ( $\chi^2 = 22.325$ ,  $df = 3$ ,  $p < .001$ ) and tenure status ( $\chi^2 = 41.443$ ,  $df = 6$ ,  $p < .001$ ) were found to be statistically significant. In a crosstab conducted to see where the precise differences lay, women were much less likely than expected to answer “never” (standard residual of -2.1), while men were more likely than expected to say “never” (standard residual of 1.9).<sup>6</sup> In addition, women were most likely to say “once a semester” (standard residual of 2.3), while men were least likely to give this answer (standard residual of -2.1). Figure 9 below shows the actual counts and standard residuals for this crosstab. (Note: The n for each crosstab presented below will not match the total n for the survey because not all questions were required. Therefore some participants’ responses were missing. The frequencies of missing responses are noted above in the descriptive statistics tables for each question.)

			Gender:		Total
			female	male	
How often would you plan to engage in some form of teaching-focused professional development if programs that suited	Never	Count	7	27	34
		Std. Residual	-2.1	1.9	
	Once a Year	Count	68	112	180
		Std. Residual	-1.5	1.3	
	Once a Semester	Count	94	70	164
		Std. Residual	2.3	-2.1	

<sup>6</sup> The general rule of thumb is that a standardized residual, or the difference between the observed value and the estimated value, is large (greater or less than expected) if it is  $>|2|$ .

your interests were offered?	Once a Month	Count	15	15	30
		Std. Residual	0.4	-0.4	
Total		Count	184	224	408

Figure 9. Crosstab. Frequency of participation by gender.

Once again, the results support the findings of previous tests; women are more likely to attend professional development activities than men, and they are more likely to say they would go more often than men.

Follow-up tests were also done to determine where the differences were in tenure status. Non-tenure track faculty were much less likely than the model expected to say they would never attend (standardized residual of -2.2) and less likely to say “once a year” (standardized residual of -2.5), and were much more likely than expected to say they would attend once a month (standardized residual of 4.0). Tenure track faculty were most likely to say “once a year,” though this was not significant, while tenured faculty were much less likely than expected to say “once a month” (standardized residual of -1.9). These findings support other tenure status findings, where non-tenure track faculty are more likely to see the value in professional development and are more likely to want to attend in future. Here, it is possible to see that they would prefer to attend programs much more often than their tenure track and tenured colleagues.

Chi-square tests were also conducted to test demographic groups by level of importance participants felt should be placed on professional development programs. The question had a 5-point response scale ranging from “great importance” to “very little importance.” Here, only tenure status was found to be statistically significant ( $\chi^2 = 29.426$ ,  $df = 8$ ,  $p < .001$ ).

Because gender had been significant in the previous tests, it was important to examine it closely here. Gender could have been found significant at the  $\alpha = .10$  level, with women more likely to answer “great importance” ( $p = .06$ ). However, for these tests, I am using an

alpha level of .05, so gender is not significant. A follow-up crosstab was performed to check the standard residuals for the significant tenure status finding. Figure 10 below shows where the group differences can be found. Non-tenure track faculty members were far more likely than expected to say “great importance” should be placed on professional development programs for teaching (standard residual of 3.2). They were less likely than expected to say “some importance” (standard residual of -2.4), which is likely due to the fact that such a large proportion of them said “great importance” instead. Tenured faculty members were less likely than the model predicted to answer “great importance” (standard residual of -2), and more likely than expected to say “some importance” (standard residual of 1.9).

			My tenure status is:			Total
			non-tenure track	tenure track	tenured	
In academia in general (not specifically at your institution), how much importance do you think should be placed on professional development programs for teaching?	great importance	Count Std. Residual	62 3.2	26 -0.1	83 -2	171
	some importance	Count Std. Residual	29 -2.4	25 -0.7	132 1.9	186
	neutral	Count Std. Residual	4 -1.4	8 1.3	21 0.2	33
	little importance	Count Std. Residual	2 -0.3	3 1.2	5 -0.4	10
	very little importance	Count Std. Residual	1 -0.4	1 0.1	4 0.2	6
Total		Count	98	63	245	406

Figure 10. Crosstab. Importance by tenure status.

These findings show that non-tenure track faculty, whose main duties revolve around teaching instead of research, believe that teaching development programs should be very important on

campus. Tenured faculty, who have probably already succeeded in both research and teaching and therefore have gained job security, are less likely to believe that a great level of importance should be placed on teaching development. The non-tenure track faculty may see this as a way to draw attention to what they do on a daily basis, perhaps in an attempt to validate their roles at the university. They might also desire more support for teaching since they do more of it, on the most part, than tenured and tenure-track faculty members.

Chi-squares were conducted on demographic groups to test participants' thoughts on how useful professional development activities would be for their teaching. This also had a 5-point response scale, ranging from "very useful" to "very useless." In keeping with previous results, both gender ( $\chi^2 = 18.169$ ,  $df = 4$ ,  $p = .001$ ) and tenure status ( $\chi^2 = 19.172$ ,  $df = 8$ ,  $p < .001$ ) were found to be statistically significant.

Follow-up crosstab tests were examined to see where the differences were for each group. In terms of gender, females were more likely than expected to say "very useful" (standard residual of 2.3), while males were less likely than expected to say "very useful" (standard residual of 1.4). While not at the significance marker of  $>|2|$ , Figure 11 below shows that females were less likely than expected to say "very useless" (standard residual of -1.5), which might explain why the expected count in "very useful" is larger than expected. The reverse holds true for males, who were more likely than expected to say "very useless" (standard residual of 1.4), since so few of them answered "very useful." This pattern is in keeping with the previous findings, where females are more likely to have attended professional development programs in the past and say that they are more likely to attend in the future.



			Gender:		Total
			female	male	
How useful do you believe professional development activities on campus would be for your teaching?	very useful	Count	49	28	77
		Std. Residual	2.3	-2.1	
	useful	Count	98	118	216
		Std. Residual	-0.1	0.1	
	neutral	Count	32	54	86
		Std. Residual	-1.2	1.1	
	useless	Count	5	11	16
		Std. Residual	-0.9	0.8	
	very useless	Count	1	8	9
		Std. Residual	-1.5	1.4	
Total		Count	185	219	404

Figure 11. Crosstab. Usefulness by gender.

In terms of tenure status, the main finding was that non-tenure track faculty were significantly more likely than expected to find professional development programs “very useful” (standard residual of 3.6). They are far less likely than expected to answer “neutral” (standard residual of -2.4). Though not technically significant, tenured faculty were less likely than expected to say these programs were “very useful” (standard residual of -1.7). Again, these findings match the results from the tests performed on participants’ perceptions of importance level, where non-tenure track faculty were shown to believe that professional development for teaching should be of “great importance,” and tenured faculty felt less importance should be placed on this type of programming. The findings from both groups of tests demonstrate that non-tenure track faculty strongly believe in the importance and usefulness of professional development programs for teaching enhancement, while tenured faculty are less likely to share these beliefs.

Chi-square tests were calculated to test demographic groups by the level of importance they perceived their institution placed on teaching development. There were three possible answers for this question: overemphasized, the right amount of emphasis, and underemphasized. Three tests proved to be significant: gender ( $\chi^2 = 6.478$ ,  $df = 2$ ,  $p = .039$ ), age ( $\chi^2 = 18.862$ ,  $df = 6$ ,  $p = .004$ ), and tenure status ( $\chi^2 = 18.445$ ,  $df = 4$ ,  $p = .001$ ). As found in earlier tests, discipline and institution did not appear to affect participants' perceptions of the level of importance placed on teaching development.

When conducting a crosstab to determine where the significant gender differences lay, no standard residual reached the significance marker of  $>|2|$ . However, the largest standard residual was -1.4, which showed that females were much less likely than expected to say that teaching development was overemphasized at their institution. They are also more likely than expected to say that it is underemphasized (standard residual of 1.2). Again, this is in keeping with the fact that females appear to value professional development for teaching more than their male counterparts, which the previous tests demonstrated in terms of their attendance and other perceptions.

The most significant independent variable in these tests was age. Figure 12 below shows that the major differences were found in the group of faculty members who were under 40 years of age; they were less likely to feel that teaching development was underemphasized at their institution (standard residual of -2.2), and much more likely than expected to say that it was appropriately emphasized (standard residual of 2.5). One likely explanation is that these younger, newer faculty members are being exposed to different messages than faculty members who have been working for longer. As the emphasis on professional development for teaching has been growing in recent years with the creation of teaching centers on campuses, certificate

programs for teaching during graduate school, and workshops at academic conferences, these younger faculty members have probably heard more about teaching development than older faculty members. For that reason, they are less likely to believe teaching development is underemphasized.

On the other hand, faculty members who were 51-60 years of age were much less likely than expected to say that the right amount of emphasis was placed on teaching development at their school (standard residual of -1.8). More of them believed that it was underemphasized (standard residual of 1.6). This supports the hypothesis above, where faculty who have been teaching longer have not been exposed to the same emphasis on teaching development as their younger counterparts and therefore find it underemphasized.

			My age range is:				Total
			under 40 years old	40-50 years old	51-60 years old	over 60 years old	
How would you rate the importance placed on teaching development at your institution?	under emphasized	Count	21	47	57	49	174
		Std. Residual	-2.2	0	1.6	0.3	
	the right amount of emphasis	Count	54	54	40	51	199
		Std. Residual	2.5	0	-1.8	-0.4	
	overemphasized	Count	2	6	8	7	23
		Std. Residual	-1.2	-0.1	0.8	0.3	
Total		Count	77	107	105	107	396

Figure 12. Crosstab. Importance at institution by age.

Because of the outcome of this test, another chi-square was calculated to examine the effects of a faculty member's age on their level of training in graduate school. Training in graduate school was not a variable used in any other chi-square tests; however, after seeing that younger faculty members thought that the level of emphasis on teaching development was

adequate at their institutions, I hypothesized that this could be due to their prior training. To try to determine if this might be the case, a chi-square of age by training was conducted, and it proved to be significant ( $\chi^2 = 230.133$ ,  $df = 165$ ,  $p = .001$ ). The older the faculty member, the less teaching training they had received in graduate school. This supports the hypothesis mentioned earlier that graduate schools are now paying more attention to developing the teaching skills of their doctoral students, and therefore younger faculty members are entering the workforce with more exposure to teaching development.

The other significant finding was that tenure status affected participants' responses to this question. The crosstab showed that tenure track faculty are less likely than expected to say teaching development is underemphasized and more likely than expected to say that it has the right amount of emphasis (standard residuals of -1.6 and 1.6, respectively). While also not near the significance marker of  $>|2|$ , non-tenure track faculty were more likely than expected to say that teaching development was underemphasized (standard residual of 1.4). These findings are in keeping with those on other tests, where non-tenure track faculty believed that teaching development was more important than their counterparts who were on the tenure track. This could be because non-tenure track faculty primarily have teaching roles, while tenure track faculty, for better or worse, receive messages that their research is the main factor in achieving tenure. Therefore, it makes sense that non-tenure track faculty believe there is not enough emphasis on teaching development on campus, while tenure track faculty are likely paying more attention to their research at this stage in their careers.

The Kruskal-Wallis test was also performed on this particular question in order to follow up on the specific differences. This test confirmed the results above, with gender, age, and tenure status found to be significant. Interestingly, in terms of age, faculty under 40 years old

were more likely than expected to say that the right amount of emphasis was placed on teaching development, while faculty 51-60 were more likely than expected to say that it was underemphasized. Though these findings were not significant, they provide support for the age findings above, where younger faculty feel that teaching development is emphasized enough, possibly due to factors outside of the university's control. These mesosystem factors will be discussed more in depth in chapter VI.

The last group of chi-squares was calculated on the level of involvement participants felt their institutions should have in promoting teaching development on campus. The responses were on a four-point scale, ranging from extremely involved to not at all involved. As with previous questions, both gender ( $\chi^2 = 9.064$ ,  $df = 3$ ,  $p = .028$ ) and tenure status ( $\chi^2 = 20.113$ ,  $df = 6$ ,  $p = .003$ ) were found to be statistically significant.

In determining where the differences lay, a crosstab showed that females were more likely than expected to say that an institution should be extremely involved in promoting professional development for faculty teaching on campus (standard residual of 1.4). Males were less likely than expected to say the same thing (standard residual of -1.3). Once again, these findings support previous survey answers wherein females believe that professional development is more useful, are more likely to attend in the future, and are more likely to have attended in the past. Because females appear to value professional development for teaching more than males in this study, it follows that they believe an institution should be extremely involved in promoting it.

A crosstab to determine where tenure status differences lay showed that non-tenure track faculty were far more likely than expected to say that an institution should be extremely involved in promoting professional development for teaching (standard residual of 2.7). They were less

likely than expected to say “somewhat involved” (standard residual of -2.2), which is probably due to the fact that so many of them answered “extremely involved.” On the other hand, tenured faculty were less likely than expected to say “extremely involved” (standard residual of -1.7). These findings echo what has been seen in previous chi-square tests; non-tenure track faculty believe strongly in the importance of teaching development on campus, while tenured faculty are often less enthusiastic about its importance, its value, and attendance.

Overall, these chi-square tests showed that the majority of the significant differences were found by gender and tenure status. While all groups were equally aware of professional development opportunities on campus, almost every other question on the survey differed by gender and tenure status. Age only mattered in the level of perceived emphasis placed on teaching development. Discipline and institution were not found to be significant in any of the survey questions. Table 12 below summarizes all chi-square tests that were conducted and clearly shows which ones were found to be significant.

Table 12 Summary of Tests and Significance					
	<u>Gender</u>	<u>Age</u>	<u>Tenure Status</u>	<u>Discipline</u>	<u>Institution</u>
Awareness					
Attendance	•				
Likeliness	•		•		
Often Attend	•		•		
Importance General			•		
Usefulness	•		•		
Importance @ Institution	•	•	•		
How Involved	•		•		

• = significant at  $\alpha = .05$  level

Gender = women were significantly different than men

Tenure Status = non-tenure track were significantly different than tenured or tenure-track

## Regressions

As mentioned in chapter III, the results of both the qualitative and quantitative data collections were used in order to determine which regression models would be set up. Independent variables that were found to be statistically significant in many of the tests above, such as gender and tenure status, are used in the regressions in order to measure their impact on the dependent variables. Linear regressions were used for survey questions with continuous outcomes, such as confidence level (scale of 0-100), while logistic regressions were used for categorical outcomes, such as awareness and attendance. The dependent variables chosen were those that had the most significant differences in the chi-square tests. The regressions also serve as a way to test the predicted outcomes for certain independent variables, such as gender or tenure status, against the actual recorded responses.

**Confidence level.** A series of tests showed that confidence level in one's teaching is not predicted by any demographic variables. Confidence level (dependent variable) was regressed onto gender (which was recoded into dummy variables). This was not found to be significant ( $p = .823$ ). Therefore, it was concluded that gender had no significant impact on a faculty member's reported confidence level.

The independent variables of tenure status, institution, discipline, and age were all recoded into dummy variables in order to linearly regress confidence level onto these demographic characteristics. Once again, it was found that these variables did not have any significant impact on the faculty member's confidence level ( $p = .400$ ).

Next, confidence level was regressed onto the level of training in graduate school; both these questions used continuous outcomes (scale of 0-100). Confidence level remained the dependent variable, just as with the tests described above. First, the data were checked on a

scatter plot; it appeared that there was no correlation. This could be due to the fact that the confidence responses were all high (mean of 82.04) and had very little variability. To try to correct for this, the data were recoded into the log of the confidence variable and the log of the training in graduate school score (mean was originally 29.38). This had no effect on the correlation. Transformations for normality were performed, recoding the values into squares, square roots, and inverses; there was still no correlation.

The linear regression showed that there was a significant relationship between confidence level and training in graduate school ( $B = .044$ ;  $p = .034$ ), where the level of confidence increased as the training level increased.

Next, age was added into this same model along with confidence level. Controlling for confidence level, age was significant in relation to training level, as shown in an earlier chi-square test. This could be due to the fact that younger faculty members have experienced more teaching training, and that may have led to a slight increase in confidence level. It is important to note that the R-squared value for this model was .013, meaning that only 1.3% of the variability in a faculty member's reported confidence can be explained by their age and their training. Though this is a low R-squared value, the regression model still showed that age and training are significant predictors that are associated with changes in the reported confidence value.

In sum, the linear regressions show that no independent variables on their own are a significant predictor of confidence level. However, age is strongly related to a faculty member's previous experience with teaching training in graduate school, with younger faculty having more training. Confidence is only slightly related to graduate school teaching training, but when age and training are combined, they are significant predictors of confidence level. Overall,



confidence is a difficult variable to predict; it may relate more to a faculty member's individual personality rather than the independent variables tested here. While training and age are slightly significant in relation to confidence level, with younger faculty having more training and slightly more confidence, these relationships are not strong enough to use in making major generalizations.

**Logistic regressions.** Logistic regressions were calculated in order to predict the impact of specific independent variables on a faculty member's behaviors or future behaviors. The previous tests showed that gender, age, and prior teaching training during graduate school were all influential independent variables in certain models; as a result, these variables were chosen for the majority of the logistic regressions below.

***Previous attendance.*** Respondents' previous attendance at professional development programs was regressed on age, gender, and prior teaching training. Overall, the model was found to be significant ( $p = .003$ ). However, the most significant independent variables were gender ( $p = .002$ ) and prior training ( $p = .02$ ). Controlling for training and gender, age is not significant ( $p = .863$ ).

The Nagelkerke R Square for this model was .06, which means that 6% of the variation in the outcome variable (previous attendance at professional development) can be explained by this model.

Next, it was important to see where these particular differences were. The odds ratios in Table 13 below demonstrate that males are less likely to attend professional development than females: the odds of a man attending are only .475 the odds of a woman attending. This is in keeping with all the chi-square findings above, where females are statistically significantly more likely to have attended professional development.

Controlling for gender, every one unit increase in a participant's training score (on a scale of 1-100) resulted in a 1% increase in the odds that the faculty member attended professional development in the past. Specifically, someone with more prior training is more likely to have attended, while someone with less prior training is slightly less likely to have attended professional development events on campus ( $B = .009$ ).

Table 13 Previous Attendance Regressed on Gender and Training				
		B	Sig.	Exp(B)
	Gender	-.745	.004	.475
	Training	.009	.045	1.009

These findings could indicate that people with more previous teaching training experience during graduate school had a positive experience with professional development programming and wanted to continue their attendance once they entered a full-time teaching job.

A similar regression was done to test the relationships between confidence, prior training, and previous attendance. When previous attendance was regressed on confidence and training, both confidence and training were found to be significant (confidence:  $B = .026$ , training:  $B = .010$ ), as shown in Table 14. For every increased point in the confidence scale (which was from 1-100), a faculty member has 1.026 the odds of having attended professional development in the past. This indicates that prior attendance is associated with increased confidence; while it is difficult to conclude that this previous participation directly caused the increase in confidence, it is still interesting to note the correlation.

Table 14 Previous Attendance Regressed on Confidence and Training				
		B	Sig.	Exp(B)
	Confidence	.026	.005	1.026
	Training	.010	.027	1.010

Similarly, for every increased point on the prior teaching training scale (1-100), a faculty member has 1.01 the odds of having attended previous professional development events on campus. It can be concluded that attendance at these programs is therefore associated with increased graduate school teaching training; once again, a claim of direct causation cannot be made, but the correlation absolutely exists between prior training and attendance at professional development programming.

However, once gender is added into this model, training is no longer significant ( $B = .008$ ), while confidence becomes more significant ( $B = .027$ ). This is due to the fact that gender and training share variance. The Nagelkerke R Square for this model is .097, meaning that this model could explain 9.7% of the variance in responses to the question about previous attendance.

Ultimately, these regressions on the previous attendance question show that gender is the strongest predictor of previous attendance in professional development programs, so much so that it dominates any model to which it is added. Confidence is sometimes significant, wherein increased confidence is correlated with an increased likeliness of past professional development attendance.

***Awareness.*** A logistic regression was used to determine the effects of gender, age, and prior training on whether faculty members were aware of programming that occurred on their campus. Awareness was regressed onto gender, age, and training, but these independent measures (gender:  $B = .510$ , training:  $B = -.008$ , and age:  $B = .128$ ) were all found to be not significant. Therefore, it is possible to conclude that gender, training, and age have no impact on a faculty member's awareness of professional development programming on campus.

***Likelihood of future attendance.*** Participants' future likelihood of attending professional development programming was regressed on gender, training, and age. Just as

above, this model was not found to be significant (gender:  $p = .091$ , training:  $p = .208$ , and age:  $p = .986$ ). Therefore, gender, training, and age additively have no impact on a faculty member's likelihood of attending professional development.

In the next logistic regression, future likeliness of attending professional development was regressed on tenure status only. The tenure status variables were recoded so that non-tenure track and tenure track faculty could be tested against tenured faculty members. Only non-tenure track status was statistically significant ( $p = .008$ ), with a high coefficient. Table 15 below shows that the odds are 97% greater that non-tenure track faculty members will attend professional development in the future as compared to their tenured counterparts. In other words, being a non-tenure track faculty member would significantly increase the odds of a participant reporting they are likely to attend professional development in the future. Tenure track faculty, however, are not statistically significantly different from tenured faculty members.

Table 15 Likelihood of Attendance Regressed on Tenure Status				
		B	Sig.	Exp(B)
	NonTrack	.676	.008	1.966
	TenTrack	.148	.598	1.160

Likelihood of attending professional development was also regressed onto reported levels of confidence and prior training. These variables were not found to be significant in predicting a faculty member's future attendance in professional development (confidence:  $p = .509$ , training:  $p = .200$ ).

Ultimately, only tenure status was found to be a significant predictor of likely future attendance at professional development, with non-tenure track faculty being statistically significantly more likely to go to such events than tenured faculty.

### **Conclusion**

Overall, the survey data and resulting statistical tests demonstrated that certain demographic groups of faculty at these two research-intensive universities differ significantly on their attitudes and perceptions surrounding professional development for teaching. However, in other ways, different demographic groups share very similar attitudes.

The most significant difference lies in gender. Female faculty members were statistically significantly more likely to have attended professional development in the past and more likely to say they would attend in future. Females responded that: they would be likelier to attend professional development activities more often than their male counterparts; they believed professional development is very useful; they found teaching development to be underemphasized at their institutions; and they believed an institution should be extremely involved in promoting teaching development on campus. Because gender was significant in almost every chi-square test that was conducted, it was used in numerous regression models and found to be a significant predictor of attendance.

The other major demographic difference was tenure status. Non-tenure track faculty were statistically significantly more likely to say they would attend professional development in future. They also said they would attend more often than their tenured and tenure-track counterparts. Non-tenure track faculty were statistically significantly more likely to find professional development useful, they believed it was underemphasized at their institution, and they believed that institutions should be extremely involved in promoting teaching development. These results were similar to the gender findings above.

The only other demographic difference found was related to age and surfaced in one chi-square test: younger faculty believed that teaching development was emphasized the right

amount on campus. A follow-up chi-square showed that younger faculty had more teaching training in graduate school than faculty over 40 years old. These two findings are likely related; younger faculty have had more exposure to teaching development programs and therefore believe that it is appropriately emphasized on campus. Relatedly, more prior teaching training in graduate school is correlated with attendance at professional development activities, suggesting that faculty with prior experience often continue their involvement.

Perhaps most importantly, discipline and institution were not found to be significant in any of the chi-square tests. This indicates that faculty perceptions about professional development for teaching have no relation to someone's discipline or school. These are surprising considering how widely disciplines vary and the fact that Institution B has a robust professional development program. It will be important to see whether these findings hold true in the qualitative interview findings presented in chapter V.

The qualitative responses on the survey also raised certain themes that will help link the survey data to the interview data in chapter V. For example, faculty were very likely to say that they did not have enough time to attend professional development programs. This theme was echoed throughout various questions, and it will likely relate to the interview findings. In terms of preferences for format and topics, faculty preferred technology-related workshops that gave them hands-on suggestions of what to do in the classroom. They also showed a preference for collaborative programming, especially since many of them noted it was community-building. Though many of them said they liked departmental programming, others said it was useful to get out of the department in order to be exposed to different perspectives on teaching.

Many faculty members expressed some negative attitudes toward professional development, which will also be explored in chapter V. Some respondents said they did not need

to learn about teaching since they were already receiving good course evaluations. Others said they did not believe it could be applicable to their teaching, while still others noted that they did not trust the facilitators' qualifications or the "one-size-fits-all" approach.

Faculty said they wanted an institution's administration to be involved in promoting good teaching on campus, as the majority of them believe that they owe it to the students to be good teachers. They hoped that administrations could communicate the value of teaching on campus without being heavy-handed in their involvement. Most faculty brought up reward structures and incentives; these will also be discussed in the interview data, as incentives are a popular way of enticing faculty to attend professional development programs.

Lastly, the open-ended responses often referenced the lack of teaching training that faculty received in graduate school. This was also a common theme in the interviews, so much so that after the pilot study, a question that specifically addressed graduate school preparation was added to the interview protocol for this study.

Ultimately, the statistical findings showed where to look for differences in demographic groups and predicted some behaviors. The open-ended responses helped gain a fuller picture of specific preferences and attitudes that faculty had in relation to professional development. Chapter V will present the interview data in order to triangulate all these findings to develop an ecological model of the place of teaching development in faculty members' busy lives.

## **CHAPTER V: Interview Findings**

### **Introduction and Road Map**

Chapter IV presented the site overview, the demographics of both the survey and interview participants, and the statistical analyses that were performed on the survey data. This chapter will discuss the findings from the eleven qualitative interviews that were conducted. First, a brief overview of the process of analysis will be given, paying particular attention to the coding scheme that was developed. Next, the major findings will be presented in sections that include salient quotes that reflect each theme. The sections will also demonstrate which demographic groups of faculty members were represented by each theme, which begins to address the overarching research question for this study. The research question will be discussed in further detail in chapter VI, where the findings will be analyzed according to the theoretical framework provided by Bronfenbrenner's (1979; 1993; 1995) ecological systems theory.

### **Means of Analysis and Coding**

While the deep data analysis did not occur until after all the interviews were complete, analysis was ongoing throughout the whole three-month process. Emerging trends and issues were noted after each interview (DiCicco-Bloom & Crabtree, 2006), which helped provide further prompts for future interviews. For example, early interviews at Institution B helped shed more light on practices and structures that were unique to the institution; these ideas could then be incorporated into questions for later interviews at the same site. This type of constant revision helped collect more detailed data as well as create a knowledge base that the interviewer had in common with the participants.



After the interviews were completed and transcribed according to the processes that were described in chapter III, they were coded based on topics that were prevalent across interviews. The thematic codes were somewhat broad, meaning that any piece of information that related to the overall topic would be coded for that category (Saldana, 2013). The initial coding list was developed during the interview pilot. The pilot study list had eleven codes, and an additional one was added after coding for this project began, bringing the total to twelve codes. The codes related very closely to the interview protocol questions, though of course some were added to the list based on what the participants chose to discuss. The codes covered the topics explained in the table below:

Table 16 Thematic Coding Scheme for Interviews	
<u>Code</u>	<u>Description</u>
General perceptions of teaching & motivation for attending professional development	General perceptions of teaching and professional development.
Graduate school preparation for teaching	Formal and informal preparation, including teaching assistantships, adjunct faculty jobs, etc.
Time constraints/scheduling issues, work/life balance	Time constraints in juggling multiple responsibilities both at home and at work.
Frequency of participation in professional development	Both how often faculty have attended in the past and how often they would attend in the future.
Preferred formats and topics for professional development	Concrete suggestions faculty may have had for future professional development programming.
Means of communication, incentives, and messages from the institution	Messages from department chairs, administrators, etc., the way in which the messages are communicated, and any incentives offered for attending professional development.
Required versus not required professional development	Faculty preferences on whether professional development should be required, as well as how they would respond to required sessions if they existed.

The role of teaching and professional development in higher education and professional organizations	How faculty believe their professional organizations (disciplinary organizations) or higher education as a whole can/should emphasize teaching and professional development.
Critiques of professional development	Any critiques faculty mentioned about past professional development sessions, as well as any reasons why they might not want to attend in future.
Perception of other faculty, including those attending professional development	Includes comments about other faculty/colleagues who should focus more on teaching or who would benefit from professional development. Also includes perceptions they have of people who do attend professional development, or fears they have of how they will be perceived after attending themselves.
Tension: research versus teaching	How faculty balance their time between research and teaching, including messages they receive on how they should be spending their time.
Gender/age/race issues	Discussion of gender, age, or race in the classroom as they pertain to students or faculty.

The interviews were color-coded based on the thematic categories above. The sections that were coded were then analyzed for trends to determine what the faculty members' attitudes and perceptions were in each of these broad areas. Then these general perceptions were broken down by demographic group.

### **Interview Participants: Demographics**

Eleven faculty members participated in semi-structured follow-up interviews that lasted between fifty and ninety minutes. The selection process for choosing these particular participants was described in chapter III; it is important to note that I tried to balance the overall group in terms of their genders, tenure statuses, and disciplines. I could not balance the variable of age because their survey responses were disassociated from the box they checked volunteering

to be interviewed, meaning I could not correlate responses on the age question in the survey to each volunteer's name. Due to legal restrictions, it is not possible to obtain age data from either institution.

Five males and six females were interviewed. Seven participants were tenured, one was tenure track, and three were non-tenure track faculty members. The disciplines varied greatly; six participants were part of their institutions' school of Arts & Sciences, while the other five were faculty members in professional schools like business, law, education, nursing, or health sciences. In addition, the participants' years of teaching experience ranged from two to fifty-seven years. This category can, to some extent, be used as a proxy for age. However, it is important to note that it is not always the case that people who had more years of teaching experience were older. It seemed that most of these faculty members followed traditional paths into academia, meaning that the younger faculty I interviewed had fewer years of teaching experience, while the more experienced faculty members were older. Two of the non-tenure track faculty members had worked many years in other jobs before entering academia and therefore their years of teaching experience cannot be used as a proxy for age.

Table 17 shows the main demographic information for each of these eleven participants. It also includes pseudonyms for the faculty members that will be used when analyzing their responses from the interviews.

Table 17 Interview Participant Demographic Information					
<u>Pseudonym</u>	<u>Institution</u>	<u>Gender</u>	<u>Tenure Status</u>	<u>Discipline</u>	<u>Years Taught</u>
1) Neptune	A	Male	Tenured	Fine Arts	45
2) Jupiter	A	Male	Tenured	Business	29
3) Minerva	A	Female	Tenured	Public Policy	28
4) Ceres	A	Female	Tenured	Education	18
5) Apollo	A	Male	Tenured	Theology	9
6) Vesta	A	Female	Non-track	Nursing	9
7) Diana	A	Female	Track	Biology	4
8) Pluto	B	Male	Tenured	For. Lang.	57
9) Juno	B	Female	Tenured	Political Sci.	19
10) Mars	B	Male	Non-track	Urban Planning	17
11) Venus	B	Female	Non-track	Health Sci.	2

### Findings

Below are the findings from the eleven semi-structured interviews. The subsections present the major areas grouped by the codes listed above. Within each subsection, major themes indicate the preferences and attitudes of the faculty members interviewed. The findings were analyzed based on tenure status, gender, discipline, and institution, since they correspond to the demographics used in analyzing the survey data. As mentioned in chapter IV, in most cases “years taught” can be used as a proxy for the age category on the survey.

### General Perceptions and Motivations for Attending

Overall, there were five prevalent themes that related to the topics of motivation for attending professional development and faculty members’ general opinions. Most faculty said that these sessions were useful, especially when they got into a rut in their teaching. As Juno said:

I really am concerned about keeping my teaching fresh and thinking about new ways to do stuff when I’ve gotten in a rut from teaching the same thing for many years in a row.

When I'm feeling bored with the way I'm approaching something, I just need to shake it up a little bit before it gets too dull. And I know I'm better at teaching when I'm excited about it.

Faculty from both institutions and multiple disciplines expressed the fact that they found professional development useful. Long-tenured Jupiter said, "I think it helps make you conscious of teaching. So you are spending time thinking, how can I explain this to somebody else, how can I do this so that somebody else might learn it better? I find that if I go to some of these workshops and things, it just kind of keeps those sort of issues in the front of my mind a little better." Mars, who had taken part in a semester-long faculty fellows program, said he found it "rewarding because of just the experience of knowing that somebody cared about putting us together to talk about teaching."

Both males and females said that they have found useful and interesting elements in some professional development program. This is different than the survey data, where females were statistically significantly more likely to say that professional development was useful. It is important to remember that the five male interview participants opted into being interviewed. It is possible that this is a biased sample who felt positively about professional development to begin with. In addition, the only person who did not talk about the utility of professional development was the tenure-track faculty member. This is in keeping with the survey data that showed tenure-track faculty might have priorities other than teaching and professional development.

An interesting theme that helped expand upon the conclusions that arose from the survey data was that faculty are often most interested in professional development when it involves

someone they know and when the topic is useful to them. These responses were confined to primarily females who were tenured or non-tenure track, which provides more context to the open-ended responses from the survey data. Tenure-track Diana said, “What matters is the topic area of the activity. Also, if someone you know is involved.” Ceres said that a major factor that helps determine her attendance at professional development is “who the faculty are. There are some faculty who are just phenomenal and it’s good to be in their company in terms of learning from them.”

Closely paralleling this is the fact that faculty have more motivation to attend when there are opportunities for collaboration with other faculty members, a theme that will also be discussed later in this chapter. Once again, this seemed to be a primarily female sentiment, and it was more prevalent at Institution A. Ceres said, “It’s great to solve problems with other faculty. It’s wonderful to listen to the kinds of things they do,” while Diana showed her desire for interdisciplinary collaboration by noting, “I’m very interested in meeting colleagues across campus and disciplines. I wish there would be more of that and more collaboration.” It appeared as if social bonds and opportunities for collaboration are more important factors for female faculty members, which could help explain why females are statistically significantly more likely to attend professional development.

Both genders, however, spoke about the desire for there to be more opportunities for professional development on campus. These responses were almost exclusively tied to faculty at Institution A, where, as noted in chapter IV, there was no formalized teaching center at the time this study took place. Apollo appeared overwhelmed and did not know whom he could seek out for teaching guidance: “I really would like to know who might be able to help me ask questions and figure things out more efficiently. Right now, frankly, I feel bewildered. Where do I start?”

Ceres simply said, “I would love to see more professional development on campus.” Institution B has a teaching center, and most of the faculty interviewed had taken part in at least one program run out of that center. Perhaps faculty at Institution A expressed a desire for more professional development on campus because there was so little to begin with.

The final theme strongly supports the survey data: females, tenured, and non-tenure track faculty are most likely to say that teaching is important. Venus pointed out that she liked teaching and wanted to be good at what she did on a daily basis, and she expressed confusion that other faculty members would not have the same feeling. As a result, she said:

I personally think if you aren't actively improving your teaching and recognizing that teaching techniques right now must be different from what they were 10 years ago, then you have a problem. Between technology and the way students behave/interact/view the world, it's just different, and you can't just do the same thing that worked for you. I think everyone should have to do [professional development (PD)]. I think everyone should *want* to do it.”

Besides showing that they feel teaching is important, female interview participants appeared to worry more about their own performances and outcomes. Minerva demonstrated insecurity in her teaching, even after having taught for 22 years; she said she often felt badly after classes where she tried hard, but was not successful: “I think if you did a survey that said, ‘do you worry about your teaching?’ regardless of how good your evaluations are, you would find that 95 percent of the people were. ‘Do you feel bad as a professor after classes because you tried really hard and it didn't work?’ Yes.” Ultimately, these feelings of wanting to succeed at

teaching and a perception of being not quite being good enough seem to be confined to women, which might also explain the survey data that shows females are more likely to attend professional development than males. They might see professional development programming as a way of overcoming these feelings and improving their teaching.

### **Graduate School Teaching Preparation**

There were three major themes that participants discussed when speaking about the teaching training they may (or may not) have received during their time in graduate school: the lack of teaching preparation, the poor Teaching Assistant (TA) experience, and the skills gained from teaching and designing their own classes, often as an adjunct (or “part-time”) faculty member. The most prevalent theme, which was mentioned by each of the eleven participants, was that there is very little teaching preparation given to students during doctoral programs, and they all believed that this was an area that necessitated great improvement. As Diana stated, “Faculty aren’t trained to teach, and then all of a sudden they get into these classrooms and are like, ‘what am I doing,’ and this has a negative impact on the students.” Most faculty interviewed said they recognized that their lack of teaching training had a negative impact on their first few years of teaching, which as Diana said, ultimately affects their students. Pluto, who had been teaching for 57 years and once served as the Provost of his institution, replied that, “You gotta start with graduate students,” meaning this is where he feels teaching training can have the most impact. Speaking in terms of his own training, he said:

At graduate school, training was next to nothing. I was visited for 20 minutes by one senior faculty member in a class that I was teaching. He came late, left early, met me in



the hallway two days later and said, 'You're okay.' And that was all I ever got in five years. I don't know if anybody else had gotten more."

Mars was short and sweet about his teaching training experience: "I hadn't been instructed in any aspect of teaching by anyone at any time anywhere." All these quotes are in keeping with the quantitative findings from the survey, where the average teaching preparation that faculty members said they received in graduate school was 29.38 on a scale of 1 to 100. While these data match, the next two themes and quotes help elaborate on the ways in which faculty experienced (or did not experience) teaching preparation in their doctoral programs.

Though many faculty served as Teaching Assistants during their time in graduate school, the second theme showed that they did not believe that TA-ing helped prepare them to lead their own classrooms once they graduated. This was found mostly with faculty who had taught for only a few years. For example, Venus felt that her TA experience was backwards, because she "would be the one to suggest ways to structure assignments or incorporate writing prompts, not [the people she was a TA for]. It didn't work in the other direction. It was backwards." Despite wanting to talk about pedagogy with the professor for whom she was working, she found that she would bring ideas to the classroom instead of receiving guidance and feedback from the faculty member. In terms of training, she explained: "I TA-ed a lot, so it was a lot of trial by fire, nothing formal. We had a TA orientation, but it was basically like, 'Don't sexually harass anyone. Here is a handbook.' I had nothing specific offered to me. I was in engineering, too, so there was very little." Teaching Assistants' duties vary, but for the most part, they involve helping a faculty member grade, holding one's own office hours, and perhaps delivering a lecture or two.

The only faculty who felt they gained some teaching experience and preparation while they were in graduate school were those who designed and taught their own classes, which three of the eleven participants did. As Ceres said, teaching her own course during graduate school was like “baptism-by-fire professional development.” Mars noted that the advisor who hired him to teach the course had no involvement in the course after that:

I actually did teach a course for money in [graduate] school. It was a writing course that I guess they thought of as being so basic that they let students teach it. My professor who hired me didn't have any input into the process at all, so I could kind of do whatever I wanted. You don't get taught how to teach in law school.

While these faculty members expressed gratitude for the fact they were able to have these experiences before they completed graduate school, they still did not refer to teaching their own class as “teaching training.” Most of the skills they gained were self-discovered, meaning they did not receive any formal preparation for teaching these courses by advisors, mentors, or other faculty in the field.

The discussions of teaching assistantships and serving as an adjunct faculty member helped lend context to the overwhelming responses about the lack of teaching training in graduate school. While TA-ing a class is often seen as teaching preparation, the interviews here highlighted the fact that it is not a formalized process and typically very little advice is imparted by the faculty member with whom the graduate student is working. Without programs, mentoring, or any sort of formal mechanisms by which graduate students can learn how to teach,

recent doctoral graduates enter the classroom with little to no teaching training or experience in teaching their own course, which ultimately impacts their students in a negative way.

### **Time Constraints/Scheduling Issues and Work/Life Balance**

Faculty spoke about how time constraints are often the main factor in determining whether they attend professional development. As this was the most common response in the survey, the interview protocol was designed to delve deeper into this topic.

The first major finding echoed what was seen in the survey data: Time pressures often determine participation, especially for junior/new faculty. Faculty of both genders, all disciplines, and from both institutions expressed the same sentiment, but it was much more prevalent among junior, tenure-track faculty and non-tenure track faculty who were new to teaching. Apollo, who had recently achieved tenure, said, “Now that I am finished or have successfully won tenure, I feel like I have time to become the best in teaching.” He noted that he did not participate in professional development more than once a year while he was a junior faculty member, but he would like to pay more attention to it now.

Venus, who had only been teaching for a few years in her non-tenure track position, talked about time pressures that she faced in her current role. She teaches large classes, and said, “I can’t sit there and grade every paper and still have time. How do you do [new pedagogical techniques] and then even have a work/life balance yourself?” She also conducts more research than other non-tenure track faculty members, and noted:

I am junior faculty, and I have done all of these things. My research and my scholarship is completely outside of my job description. I am not paid on a contract that says I am supposed to do research. So the fact that I am juggling all of this and I get good course

evals and I never was officially trained and I didn't do a post doc...you know, throw me a bone, people.

Venus, more than all the other faculty participants, expressed a sense of stress and being pulled in multiple different directions.

Vesta, another non-tenure track faculty member, who had just completed her first full year of teaching at a new institution, noted the fact that designing courses takes up more time for new instructors. She said, "I couldn't attend all of [the PD sessions offered], and I wish I could have. They would have all been applicable to me, but as a new instructor I had to spend so much time on the specific content of the class that it was hard." Vesta's professional school was very encouraging of faculty attending professional development, and yet she still found it difficult to attend.

Even tenured faculty members said they did not have enough time for professional development activities, despite having a desire to attend. Neptune, who has been tenured for over 30 years, said, "I really thought about doing a faculty seminar, but the issue is time. I'm often interested in certain [sessions] but then I don't have time. But I'm sure faculty who want to spend a little more time focused on that would take advantage of it." Neptune said he used to participate in professional development more back when his department arranged activities, but they do not do this anymore.

The second major finding related to the issue of time was that there are other competing pressures on faculty members' time, especially for those with multiple roles. While this is similar to the first finding, quotes that were clustered in this area specifically related to faculty who referenced their other roles in life, either inside or outside of the university. These findings

crossed genders, institutions, tenure statuses, and disciplines. For example, Ceres also serves as an assistant dean, so she referenced the fact that she has not been able to attend sessions due to her duties for her “other” job. Non-tenure track faculty member Venus talked about the balance she has to strike with advising: “I had 49 advisees last year, which is a really heavy advisee load. It’s a lot of what I do. I’m starting to be in a place where I can say I do not want to take any more advisees because I just won’t be able to sleep normal hours if I do. So it’s a balance.”

Neptune, who used to be a department chair, talked about retreat weekends that used to be held at Institution A in which faculty would go away and talk about teaching. He said they were “very, very helpful but we found out that it took too much time for a whole weekend, especially for someone who had a family, because it put the strain on the spouse.” As a result, the retreat weekend initiative only lasted a few years.

Neptune summed up faculty members’ perception of attending professional development in terms of their other competing factors in life. He said, “It’s not that they’re disinterested so much as they’re trying to keep up with papers, recommendations, classes, family obligations, so it is a juggle. I mean, you’re juggling all these factors and you say, ‘what’s the most important?’”

### **Frequency of Participation in Professional Development**

Another subject that participants spoke about was their desired frequency of participation in professional development activities. While their responses varied, most people said they would attend professional development once a semester or more. Male faculty members, specifically those at Institution A, were more likely to give concrete numbers. For example, long-tenured Jupiter said, “Usually I go once a semester, at least. Maybe one and a half on average.” Recently-tenured Apollo said, “I used to only go once a year, but I became much more

likely to participate in non-research related university activities after I got tenure.” While the survey data showed that females were statistically significantly more likely to have attended professional development in the past and would be more likely to go in the future, females did not spend as much time in interviews talking about exactly how often they would plan to participate.

When discussing how often they would like to attend professional development in terms of one-session events or ongoing programming with the same group members, it was evident that female faculty members with more years of teaching experience would prefer ongoing groups. This was also a prevalent theme with faculty in the social sciences. Tenured social scientist Ceres said, “I like ongoing groups. The dynamism of it is very nice, and it gives us each things to think about and to come back to investigate more deeply.” No male faculty members who were interviewed said that they would prefer ongoing groups, such as faculty learning communities.

Male faculty who were interviewed, however, said they would prefer short, one-time sessions. The one female who said she would prefer one-time sessions was the tenure-track scientist, whose responses often were not in keeping with what the other female participants said. This could be because no other females were on the tenure track or in the sciences. This group of participants said they like sessions that run between one and three hours, as they would not want to spend too much time on professional development. Neptune noted, “Usually a three-hour workshop is what I see as ideal. [I used to participate in one that] was like on Tuesdays from 3-5:30 pm, and that was very effective.” Mars, a non-tenure track faculty member, said he “would go for an hour to learn a couple of new things,” while the tenure-track female scientist, Diana, said “I prefer hour to two hour workshops, not a whole day thing.” It is important to note

that Diana was the only tenure-track faculty member who participated in an interview, which in itself may present a microcosm of the tenure-track attitude toward professional development or the fact that they appear to be the busiest subsection of faculty members.

### **Preferred Formats and Topics**

Preferred formats and suggestions for future programming were subjects that faculty in the interviews wanted to talk about the most. Once they were asked about their specific preferences for formats and topics, people offered numerous suggestions for what they would like to see offered for professional development opportunities. As such, this section will be subdivided into the major themes that emerged from the interviews.

**Most people prefer hands-on formats or mixed-formats/multiple modalities as opposed to lectures.** Faculty, especially those in the social sciences, would prefer hands on professional development opportunities. Women were also more likely to discuss a preference for mixed modalities instead of pure lecture. For example, social scientist Ceres said:

I like hands-on. I think a good format is eclectic where there is some lecture, there's some hands-on, there's some individual work, there's also some constructivism. I also like multiple modalities. I can't sit and listen all day. I like visuals. I can remember a visual far more easily than I can remember a lecture.

Similarly, Juno noted, "Hands-on stuff I do like except that I really hate role-playing." The faculty members who discussed most in depth their format preferences tended to be those who had been teaching for more years.

**“Food is essential.”** While no interview question directly asked about food in relation to professional development sessions, almost every single participant brought it up on his or her own. Faculty said that food would certainly encourage them to attend; Ceres said, “Every time you bring food it’s a good thing,” and Vesta added, “Food always helps. It doesn’t have to be elaborate food.” Although this sentiment crossed tenure statuses, genders, institutions, and disciplines, the people who talked the most about food happened to be those who had taught longer. For instance, Neptune recollected previous professional development activities held in his department in the 1980s where no food was offered. He could not remember the topic of the session, but he did remember his impression of it being “bare bones;” clearly the presence of food makes more of an impression on faculty members than the content of the session!

**The term “professional development” is problematic; it should be changed.** This theme came up with a few of the participants, specifically those at Institution A. Two long-tenured faculty who had held other administrative positions in the university said they felt that the term “professional development” was often off-putting. It was clear that they, as administrators, had thought a lot about this. Ceres said:

Professional development the word itself is problematic because it’s like professional education. I don’t like development and I don’t like in-service. That comes right out of the K-12 model. It’s almost like you’re not professional so we need to develop you. That’s not the way we need to look at it. It’s like professional growth and change. Development sounds like it’s being done to you.



Neptune, a former department chair, said, “I call it ‘continuing ed’ because we all learn.” Both of these faculty members wanted to explicitly address what they saw as the problematic nature of the term because they felt like using other terminology might increase participation in professional development on campus.

**Formats that allow for collaboration and asking the advice of other faculty members would be useful.** Faculty across genders, tenure statuses, disciplines, and institutions talked about how much they would appreciate more chances to collaborate with other faculty during professional development sessions. The only faculty who did not mention this were those who had taught for only a few years. Faculty who had been working at their institutions longer seemed to have more desire to meet their colleagues in other departments. Juno, long-tenured at Institution B, said:

Sometimes just sitting around talking with people about ideas or brainstorming about a particular class, like what do you feel like the problem is in the class and getting some ideas about how you could shake it up. Like here’s a problem that I’m having, or I don’t know what to do in this situation, and we can help each other figure that out.

Similarly, Apollo noted, “The reason I prefer groups for this kind of thing is that other people bring questions I don’t have but can definitely benefit from. Maybe they have experience that I don’t have.” Therefore, most faculty interviewed were likely to recognize that their peers might be good resources for discussing issues they face in the classroom.

**Sessions should focus on specific problems and topics.** While it seems fairly obvious that sessions should be devoted to specific topics, it appears as if faculty do not believe that

professional development sessions are sufficiently focused for their liking. Every participant had numerous suggestions for topics that they would like to see offered on campus. Some focused on big pedagogical questions, like Apollo:

Pedagogical techniques, particularly ways to engage in a seminar. What I am not very good at is finding ways to compel positively the quieter students to participate...I am also looking to learn about an efficient method to present complex materials in a way that allows me to cover that which is necessary in a lecture while also allowing students to go and figure the rest out on their own.

Though newly tenured, he still had many big questions that he was grappling with in his classroom. He also wanted to learn about “how to foster critical thinking by engaging others’ work, and the boundaries that need to be maintained for that to be legal.”

Former provost Pluto also expressed a desire for professional development to focus on big topics, such as:

The inculcation of the idea that teaching is a performance, and if you’re not prepared to be a performer and develop interests and a heightened sense of attention...it’s the technique of getting kids to stay interested. It’s technical, and it’s very much a performance. And you better have a fear of failure so a lot of it is psychological on the part of the instructor. It’s gotta be more than information. It’s how you deliver the message.

Pluto's former work experiences had caused him to think about developing faculty as teachers more than some of the other participants, and it was evident in the way he spoke about teaching.

Other faculty had more specific suggestions for programming, like Vesta, who was facing a big issue in her first year of teaching at Institution A: "How to deal with teaching graduate and undergraduate students in the same classroom." Though she worked through it over the course of the year, she still said that this was the biggest problem she dealt with on a daily basis. At Institution B, Venus said she would like to see sessions focused on "diversity in the classroom. That one seems key for most faculty at this point. I wouldn't say many of us do that well." Juno, tenured at Institution B, wanted to know more about student development. She said, "Getting some knowledge about where kids that age are in terms of developmental stage would be quite helpful to me." Minerva immediately listed a number of topics that she would want to learn more about: "How to explain what's wrong with the B+ paper. How do you run a seminar that balances enough information with enough discussion? How to be an effective teacher as you get older...how to be an effective teacher in your 60s and 70s. How to be an effective teacher in your late 20s and early 30s when you look the age of the students. What should you do when you get your teaching evaluations?" Though Minerva tended to critique professional development more than the other participants, she was quick to offer up suggestions of how it can be made more useful.

**Technology in the classroom is an overused topic, but faculty have specific technological questions that they would like addressed.** While most faculty at least touched on the topic of technology in the classroom, faculty at Institution B almost unanimously said that technology in the classroom was an overused topic that they were tired of hearing about. Venus said, "You always get a lot of people talking about clickers. I only need to hear about clickers so

many times. I am not that interested in using them. I know other people – and I am not one of them – who are interested in how to use Twitter in our classrooms.” Juno echoed this with, “If it’s clickers I’m not interested. If it’s other kinds of technology then I’m probably interested.”

Overall, though, faculty had a few concrete suggestions of how they would like to learn about technology’s role in the classroom. Venus wanted to hear more about the flipped classroom and asked, “How do you bring technology to the classroom in a way that feels natural and not like you’re using it just because you can?” Minerva brought up the big question of:

Where should students be looking in a digital classroom? In the old days there was one person and you looked at them, and now you’re asking students to constantly transfer their attention from one thing to another to another and I think how you learn how to manage that, how do you signal that to students.

On a more micro level, Neptune said he would “be interested in ways of electronic grading.” Both Mars and Diana, with different institutions and different tenure statuses, said they would like better instruction in using PowerPoint. Mars said, “I’d need a more focused thing. Like how to use, just as an example, advanced PowerPoint, how to create fabulous PowerPoints.” Diana noted, “I want to get better at PowerPoint in the classroom. The later you get in the semester the worse my PowerPoints get.”

These preferences can help drill down into the survey findings outlined in chapter IV. While the overall data showed that faculty were not very interested in long-term, ongoing professional development opportunities such as learning communities, the interview data shows that some tenured females would in fact be interested in this type of format. The interviews also

show faculty members' mixed feelings on technology-related teaching training; they feel that it is overdone, but in some cases, they have very big questions on the role that technology plays in the classroom, while in other cases, they would like help on specific programs like PowerPoint. Once again, the theme of collaboration with other faculty is echoed, though it appears confined to female faculty members.

### **Communication, Messages, and Incentives from the Institution**

This category was another topic about which faculty had extensive opinions, and it will therefore be divided by subheadings of the six major themes. While direct questions were asked about messages and communication from the institution, there were no questions asked about incentives; faculty brought this up without prompting.

**Support for teaching development varies on a departmental and school level. In general, professional schools are better about promoting teaching and professional development. There is a perceived lack of institutional support overall.** Overall, faculty felt that there was not much institutional support for teaching development. Support is the strongest in the professional schools, which all seem to highly promote teaching and its development. At both institutions, Arts & Sciences seems to offer the least support. Juno, tenured in Arts & Sciences at Institution B, said:

Teaching is important in my department, but I wouldn't say that they particularly give us the message that development classes or activities are something that we should do. So it's not really made clear where we're supposed to get new ideas for innovative teaching.

On the other end of the spectrum were the schools of business, nursing, and law. Jupiter said:

[Institution A] does a lot of things across the board, and I've always felt like I was pretty well informed about what's available [for PD], but never felt any pressure that I had to do this...or else. I find it a little more persuasive if something comes from the school, actually, than the department. In a professional school, the school is often a bigger deal than the departments. Here I feel as much identity with the school as I do with the department.

In her professional school at Institution A, Minerva said that teaching is highly valued. Sometimes this has a negative impact on her personally, as she noted, "I've never been in a place that makes you feel so much like if you're not a good teacher you're a bad human being." Additionally, Vesta praised the nursing school and said, "Teaching is extremely important [to the administration of my professional school]. They want their students to be satisfied. They want their students to graduate and be able to pass all the exams—to be leaders in the field. I really feel like this department works hard to make sure that we have leaders in our field." These findings help flesh out the survey data in that it is possible to see how people have developed varying opinions of professional development and teaching in general. The interviews show that, of the institutions represented in this sample, professional schools talk about teaching more than Arts & Sciences and the overall university administration do. This particular finding would be a topic for further research, especially to determine whether it is measurable quantitatively.

**Stipends or grants, even small ones, would help incentivize faculty to attend professional development.** Faculty almost unanimously mentioned that stipends would help get them to attend professional development. This was mainly confined to tenured faculty members,

though a few non-tenure track faculty also mentioned it. It appears as if Institution B is in the practice of offering stipends, which appears to have increased participation; Juno said, “They do pay us a little bit of money to go to those meetings and that, frankly, is a big incentive.” Mars, who has also participated, said, “I hate to say this, but when I’m offered a little bit of money I’m prompted to do a lot of things. I can’t really tell you if I would have [gone in the past] if I hadn’t been offered money.” At Institution A, Apollo said, “A factor [in getting me to attend PD] would be some kind of incentive. An incentive that’s very real and can also be withheld. I think the strongest incentive is going to be showing how it’s relevant to promotion and tenure. And also money.” More faculty at Institution A talked about relating attendance to promotion and tenure, possibly because they had not experienced any professional development that offered monetary incentives. This relates to the third theme below.

**Faculty do not feel that professional development or methods to improve their teaching are valued in the tenure, promotion, and annual review processes.** Faculty across genders, disciplines, institutions, and years taught mentioned the fact that attendance at professional development activities is not rewarded by the administration in notable ways. Ceres said, “If it were valued on the annual review I’m sure more people would go.” Apollo, who had just been through the tenure process, said that, “[PD is] going to be more noticed and yield a much more positive response if it’s clear that the chair prioritizes it and it’s valued sufficiently by the administration.” He felt that it was not at all discussed in his tenure process, and he suggested ways in which the administration can market professional development more effectively to faculty members:

The most important thing is rewarding the time invested with something related to promotion and tenure to show it actually matters and is not just window dressing. It might just be a matter of labeling. Use big, bold letters. And a note, maybe: ‘This Can Be Put Into Your Professional Development Box.’ To me, that would show it’s something the university cares about. Simply showing how an opportunity can be turned into a documentable act of service or teaching. If you have a number of these, it shows that you’re invested.

This topic was talked about by tenured and tenure-track faculty members more than non-tenure track faculty, as they do not follow the same promotion process. However, they do participate in annual reviews, and one non-tenure track faculty member said she was upset by the fact that professional development is not covered in her annual review.

**Faculty perceive that messages from department chairs, deans, and provosts do not communicate the importance of teaching and professional development. If they did, it would help encourage participation in professional development programming. Faculty feel that the administration does not care about teaching.** This theme was found with faculty at both institutions, across genders, and across disciplines. Long-tenured faculty members at Institution A said they did not feel their departments valued professional development. Jupiter said, “I don’t think that the department puts great weight on professional development activities per se.” Neptune said, “[PD] is not encouraged. I don’t think that it’s been highlighted that much. We used to have [more initiatives] in our department, but we don’t anymore.” Tenure-track Diana said, “My department chair doesn’t talk much about teaching, mostly about grants.” According to previous findings, Institution A does a good job of supporting teaching in



professional schools, but these quotes show that there is limited support on the departmental level.

Most faculty said that they would attend professional development if their department chairs or deans encouraged it: Ceres said, “If the Dean asked me to do something I would do it, absolutely.” Apollo echoed, “If our faculty receive something from their chair saying the provost really wants us to take initiative and get involved in this, then that would certainly bump up attendance by quite a few seats.” Non-tenure track faculty felt the same way, as Vesta said, “If my department chair tells me I should go to something, I go to it.” She added her suggestions on how the message about professional development should be circulated: “I think it should be disseminated to the chairs, and perhaps if the chair notices something that would be particularly good for a new employee or an employee who could use help in a certain area, then maybe the chair could say, ‘I really think you should go to this.’” These findings could be useful for teaching centers when determining how to send out messages regarding professional development programming.

A stronger critique of the administration was prevalent at Institution B. Venus said, “The administration does not value teaching. I think my boss appreciates the fact that I care about the teaching and that I get good course evaluations. I think she cares about the visibility of our program to the administration.” Mars added, “I don’t think [teaching is] particularly important to them [the administration]. I don’t know what is important to them at this point. I think saving money is. And I think seeming cool is, and I think doing things that get press is.” Faculty at Institution A seemed to support their administration more than faculty at Institution B.

**Faculty do not want to feel pressured into going to professional development.**

Faculty at Institution A, specifically those who had held other administrative positions, said that

the way in which professional development is presented can affect attendance. For example, Ceres said:

If it's like, 'you're really deficient in this, you really stink, we really need to get you better in this,' and as much as I'd like to do that sometimes, I'd like to say to somebody, 'you really ought to get your act together and take this course,' but I think if it can be phrased in a way that the bottom line is, 'we're here for the students and it will improve the way we work with students and educate them.'

Overall, she felt that, "If we can make the students the focus, then the possibility of victimization in some way is eliminated." Neptune expressed much of the same feeling. With both of these participants having been in leadership positions, they probably spent more time thinking about the presentation of such sessions to faculty and therefore realized that some faculty are afraid of being pushed into attending. It is interesting to note that these are also the same two faculty members who said that the term "professional development" is problematic.

**Institutions should more clearly communicate with faculty members about what kinds of professional development programs are offered.** The last theme in this category is that some faculty members felt they were not made aware of what kinds of programming were offered on campus. This was mainly found with faculty at Institution A, where again, there is a less robust professional development initiative as there was no teaching center. Tenured faculty member Apollo said:

To be honest, after that first training session [I attended], I just didn't know afterwards where to get help with that stuff if I needed it. I just didn't know who to follow up with

or whom to call. Maybe that's my own laziness...but I also thought it just wasn't obvious to me where to get help. I had to do *so* much research.

Obviously, if professional development is not advertised and faculty members do not get the sense that the institution cares about it, they will not attend.

### **Requiring Professional Development**

One portion of the interview asked faculty participants about their thoughts on required professional development. For the most part, required professional development would upset faculty members. As Jupiter said, "Required seems a little heavy-handed." Pluto echoed, "You can't do it. We're by nature anarchists, and ungovernable. It's the incompetent leading the ungovernable." This sentiment crossed genders, tenure statuses, disciplines, schools, and years taught. Juno said, "It would piss me off." Apollo said he would rebel: "I just wouldn't go. I don't think you can require that," and Diana said, "Required doesn't make me feel warm and fuzzy. That's what this is about, right, is that you want to get a warm and fuzzy feeling?"

However, in three interview cases, faculty replied that required professional development would increase attendance, and they would not mind it. This was primarily found with females in the social sciences, specifically those who were great proponents of professional development. Ceres, who previously talked about how much presentation matters, said:

If it's required, it's required, you know? We all have things we have to do. I think often times we're reluctant because we're afraid, and doing something different or that we don't understand kind of frightens us. No one wants to be told what to do. It's got to be presented in a way where you respect a person's expertise.

Venus, a non-tenure track faculty member who had previously said she thought professional development should be required for faculty said:

If it's mandatory attendance or you have to be there for a certain amount of time because it's on campus, the visibility helps because you know there will be some administrative people that you will happen to see there, and you can do sort of a meet and greet. I am pretty likely to go to these, so my reaction would be, 'Ha ha, now everyone else has to go.'

A subtheme of the last theme was that two faculty felt that some topics of professional development should be required, such as student development theory, while 3-4 other faculty interviewed felt that it should be required only for certain demographics. As with the last theme, this was mostly specific to females. Ceres, an Associate Dean, said, "I would require every faculty to have a course in student development theory. You certainly would improve our ability to key in on kids who are having issues. We might be able to better address some of the difficult issues we have on campus." Juno specifically referenced junior faculty:

I do think that it's important to have these things available especially for junior faculty who might be having trouble when they're first starting because at least then they can say if they get a difficult evaluation in their second year review they can show in their fourth year review, look, I [attended PD] and I'm working on it. So that actually is an important protective thing for them.

In addition, both Venus and Apollo mentioned particular faculty members in their department who they believed were not good teachers. They felt that faculty who were consistently underperforming, or those who did not get good teaching evaluations, should be required to attend professional development sessions.

### **Teaching and Professional Development in Higher Education and Professional Organizations**

Some faculty discussed professional development in terms of its place within higher education. They also mentioned professional organizations/disciplinary societies and the role those can play in heightening the awareness placed on teaching. Overall, faculty felt that professional organizations can and should help promote professional development for teaching. While faculty across disciplines, genders, and institutions mentioned this, only tenured and tenure-track faculty spoke about it in detail. This could be because professional organizations and their annual conferences play a large role in research, and tenured and tenure-track faculty are more likely than non-tenure track faculty to engage in research. In addition, tenured and tenure-track faculty often receive travel funding from their institutions in order to attend conferences, especially when they deliver presentations. Therefore, non-tenure track faculty members are less likely to be members of these societies and less likely to travel to these conferences.

The second theme relating to this topic was expressed by all interviewees, though it was especially prevalent with the females. They noted that higher education as a whole should incentivize and reward professional development and good teaching. Simply put by Diana: “It needs to be rewarded. Nothing [about teaching] is rewarded here.” Juno linked professional

development to incentives, which were discussed above. However, she went further by talking about rewarding good teaching in general:

There should be some kind of a clear indication that it would be rewarded to participate in it. I think it has to be as basic as incentives and showing that there is some reward other than just feeling good. And that doesn't mean that they have to give you lots of money or anything like that, but really recognizing good teachers, not just at the end of your career. Just signaling in lots of different ways that they care about teaching...that's where it has to begin. Because the signals right now [at Institution B] are that clearly research is more important, so why bother with teaching?

The tension between research and teaching will be discussed more in depth below, but it is possible to see that many faculty have alluded to it in other contexts, as well.

Venus also talked about rewarding good teaching, though she focused more on correlating it with one's salary and status: "Make it part of our promotion process. Reward good teaching! We have a merit-based salary increase every year...they can look at your performance, they can do a little better than a 2.2% increase. They can offer awards...all sorts of things." Most faculty interviewed used professional development for teaching as a starting point to talk about how teaching was undervalued and under-rewarded by their institutions in general, which is in keeping with the survey findings; 40.4% of survey respondents felt that teaching was undervalued at their institutions, and 82.5% of all respondents said that "great" or "some" importance should be placed on teaching development.

The third major theme in this category was that institutions should know what their unique mission is and how teaching fits into it. Once faculty began talking about professional development, many of them expanded upon it to talk about the role of teaching in higher education, which ultimately related to their own institutions. The topic of mission was expressed mainly by tenured, male faculty who had been teaching for many years. Jupiter said:

Teaching is important at all business schools and law schools. I think particularly most of the top business schools have only graduate students and no undergrads, and it's the whole thing where the students are paying their own money to go there, and they are older, so they are a little more demanding about what they want to get out of it.

He clearly understood where teaching fit in at his own professional school. However, Institution B was criticized more strongly for not understanding its own mission. Pluto, who had been teaching there for 57 years, said, "Each President and each board has to understand what its institution is all about. They don't talk about it enough." He often talked about the schizophrenic identity of Institution B and criticized its administration for not understanding where teaching fit into its mission.

Lastly, faculty were eager to bring up the fact that university teaching has become bifurcated between full-time, non-tenure track teachers/lecturers and tenured faculty who do research. They felt that this is a problem for teachers, students, and the university. As with the last theme, this was primarily a topic that tenured males discussed, though this particular critique was heard more often from faculty at Institution B. Mars, a non-tenure track faculty member, said:

The idea of teaching becoming bifurcated at the university level is unfortunate because it means that assumptions are made and pressures are placed on people for things they are not really valued to do. In other words, a top research professor could be a really bad teacher, and as long as they don't set the classroom on fire it really isn't going to matter. While they might appreciate some help teaching it might be better to focus on them as researchers whereas this increasing cadre of people who are non-tenured track lecturers who have high teaching loads, conversely, the university is not investing in these teachers.

Being one of these lecturers himself, Mars was especially quick to point out that his university was not investing in him or his skills as a teacher. He felt isolated and undervalued by his institution.

Although faculty did not specifically address the increase in the use of adjuncts, they did talk about the increase in non-tenure track instructors. Pluto noted the disrupting trend by saying, "That's been the biggest change in my profession over the last 50 years. Senior faculty no longer teach introductory courses, and they teach half a teaching load. My load here was full when I came. That got cut in half. That's why you've got too many [non-tenure track faculty]. We created the problem ourselves." As a former administrator, Pluto brought external, broader knowledge to the situation and highlighted the fact that his own institution could not properly articulate its relationship with teaching. Mars continued:



There's a sense that if we praise our lecturers to high heaven and tell them how valuable they are but we actually don't reward them, and we treat them a little bit like cogs in a machine, that delivers the best of both worlds from [the institution's] point of view. If things get tense we'll just praise them even more. And that is going to ultimately break down. When upwards of 40 percent of your teaching staff are non-tenured lecturers it isn't sufficient any longer to say we'll just tell them how great they are. That isn't going to satisfy them, and it certainly isn't going to improve their teaching because it has nothing to do with their teaching. Now you've got a staff who are almost completely justified based on their interactions with students and their ability to teach, and I think it places a huge responsibility on the institution to define what it means by teaching.

Mars critiqued the administration at Institution B by saying they did not focus enough on teaching, yet they try to praise their non-tenure track faculty whose only job is to teach, while at the same time offering them no incentives to improve.

### **Critiques of Professional Development**

Though this particular sample of faculty members had overall positive perceptions of professional development, there were some specific critiques voiced. The most common one, which was relatively generalized, was that professional development programming is not always useful. This was similar to the findings from the qualitative survey data, but it began to add more dimension to the data. For example, Mars said:

I found [the PD facilitator] to be so intellectually situated that I found the thoughts to be hard to understand to begin with, but impossible to apply. I said it to the whole faculty

and got looks of silent horror that I had said this. It's kind of like I write them off for that part. Members of the faculty said that it was one of the best conversations they'd had and I was just appalled.

Mars' overarching critique here was that the information gleaned from the session was too difficult to apply in his own classroom. He thought that the facilitators presented too much scholarly information instead of focusing on the practical suggestions that faculty could take away and immediately implement. This complaint regarding utility was echoed by faculty members across genders, disciplines, institutions, and tenure statues.

A few faculty interviewed focused on the fact that professional development is presented at too low a level, which is in contrast to Mars' overall complaint. This was mostly expressed by tenured, female faculty in the social sciences who had taught for a longer period of time.

Minerva said:

One problem is when the person who does it presents the material at such a low level. It's so obvious, and it's sort of insulting. Nobody who is teaching in a university doesn't have the capacity to absorb information relatively quickly, rapidly, and ought to be presumed to want to do something. If they're not doing it it's because they have an alternative. So the whole conversation ends up being, on the one hand, way too slow to absorb anything useful because it's taught as if nobody's ever taught. And secondly, it ends up with people feeling very defensive.

Minerva often talked about how faculty would end up feeling defensive at professional development sessions; this will be discussed further below.

Another major critique of professional development was that sessions about technology are overdone. As this was already discussed above in the section on preferred topics, only a brief mention will be made here. Most critiques were from female faculty members in the sciences and the social sciences. Juno, at Institution B, said, “I don’t know if I would really want to sit through a demonstration of new technology because I’m just kind of suspicious about technology being the solution for everything.” Diana, tenure-track in science at Institution A, had already attended professional development sessions on technology. However, she felt that, “[the technology session I attended] wasn’t helpful at all. It seemed like it was a commercial for iPads.”

Lastly, some faculty talked about how professional development sessions can degenerate quickly, especially when faculty use them as an outlet to vent. Mostly female faculty members raised this issue, though it was widespread across disciplines, tenure statuses, and institutions. Minerva was the most vocal:

I’ll tell you why I think a lot of [PD sessions] fail: let’s have a thing where we all talk about this problem or we all talk about teaching. I think they make an effort. But in a discussion style session the thing ends up being, instead of a space where people can say, ‘here’s the thing I would like to do better,’ you have all sorts of colleagues who you know are mediocre teachers quite frankly telling you like you’re a fool what they do. My teaching evaluations are usually between 4.5 and 5. I love thinking about teaching. But

to sit there with people who have 3.8s lecturing me? That whole conversation becomes incredibly annoying.

She repeated: “It’s not helpful and instead becomes either show-off-ness or defensiveness.”

Other female faculty members expressed similar sentiments. They felt that professional development programs tended to turn into “bitching sessions,” which was not very useful for those who were looking for concrete teaching help.

### **Perceptions of Other Faculty Members**

Many faculty members talked about their perceptions of their colleagues in terms of teaching and professional development attendance; for the most part, these comments were not positive. There were no direct interview protocol questions that asked about this, yet faculty seemed very eager to talk about their colleagues. The topic is subdivided by the four major themes below.

**Only the faculty who care about teaching make the effort to attend professional development.** Some participants noted that they themselves cared about teaching, and that is the reason why they bothered to participate in professional development activities. They felt that other faculty who also attended these events felt similarly; as Juno said, “Only the people who care about teaching show up, sign up for this.” Venus often expressed statements that were similar to Juno’s, as when she said, “I really feel like the people who need to go to the teaching stuff don’t do it. That’s part of the issue; it’s not people like me, who are pretty committed. It’s people who aren’t necessarily sold on the concept who need to go.” For the most part, females in the social sciences had this high-level view of their own participation, while men did not talk about other professional development participants in the same way.

**Faculty have colleagues they perceive as ineffective teachers who would benefit from professional development.** Contrary to the demographics of the last theme, every faculty member who participated in an interview felt that they knew colleagues who could benefit from professional development. Apollo said, “There are many [in my department] who don’t know much about technology.” He went further to critique specifically tenured faculty members: “The problem is that many people, by the time they get tenured, have been teaching long enough that certain habits have become ingrained. It’s better to achieve these developmental interventions before.” Venus, who repeatedly said that she would be in favor of required professional development, once again suggested it should be required for certain faculty members. She said, “I think many of them, it’s not that they don’t care, although I do know a handful who don’t, but the rest probably need a little bit of help. I would be glad [if it were required] because there are a lot of people who really need to hear this stuff.” Other critiques by Venus included the inaccessibility of her colleagues to their students; while this is not necessarily about pedagogy, it relates to classroom performance. She said:

There are professors in our program who are much less accessible, some by choice and some because they just don’t realize they’re being inaccessible, whether they say things in the classroom that are offputting or their office hours are ridiculous or they just don’t make the time. They don’t respond to e-mail or they are disorganized, and it puts a very heavy burden on the people who are responsive.

Some professional development sessions do focus on accessibility and responsiveness, which would clearly be beneficial to Venus’ colleagues.

Overall, most faculty said that they knew of some peers who could (and should) attend professional development for a variety of reasons. Minerva felt that many of her colleagues' problems in the classroom were easy to fix, but that they just did not care to do so.

**It is difficult to get faculty to do things (like go to professional development), even when it would help them. Some faculty believe this is due to conceit or complacency on the part of their colleagues.** This theme echoes some of the same sentiments found in the previous section, though the critiques became a bit more harsh and broad. Once again, these criticisms crossed gender, tenure status, institution, discipline, and years taught. When discussing understanding the cognitive abilities of her students, Venus said, "Who are these lunatics who don't want to learn [student development theory]? As a professor, why would you not want to know that?" She continued in her criticism of other faculty to say, "If you refuse to try it, you're being obstinate or you don't think you have a problem or you don't recognize you're failing to keep up with the times and connect with your students. Maybe you believe you are a prodigy in teaching and need no help...so I don't know what the problem is." Overall, Venus was the most vocal about critiquing other faculty, though she always expressed satisfaction with her department chair.

Pluto and Neptune, both long-tenured former administrators, demonstrated their overarching critiques of faculty from an experienced, high-level perspective. For example, when talking about trying to get faculty interested in attending professional development, Pluto said, "There's got to be a different approach because you gotta get old people like myself or other people to learn what technology's going to do to your teaching." Neptune seemed to think there would be no solution to trying to get faculty to attend, as he stated, "This faculty is very complacent and interested only in what they're doing for the most part." Minerva used the

words “conceit” and “self-centered” when talking about the faculty with whom she worked.

While these critiques are less targeted than those of the much younger Venus, they are all similar in that they believe their colleagues should be more willing to attend professional development and to focus on their teaching.

**Faculty members are afraid of being criticized by others for appearing to care too much about teaching and not enough about research.** This concern was mainly demonstrated by women, specifically those in the professional schools and in science. Minerva said, “If you’re seen as somebody who wastes time on your teaching then you’re not someone who is working on your grants.” These faculty were afraid that caring too much about teaching would make other faculty think less of them. Though only two faculty members mentioned it directly in this study, three of the five faculty in the pilot study also expressed the same concern. Two were females, who said they were specifically afraid of being pigeonholed as female faculty who only care about teaching, which is often seen as “softer” than research. This theme helps expand upon the survey data, where it was possible to see a tension between research and teaching, but there were no qualitative responses that said people were afraid of attending professional development for fear of how they might be perceived by others.

### **Tension: Research versus Teaching**

This topic threaded throughout all of the interviews, as seen in the last theme, but probing questions in the interview protocol helped encourage faculty to expand upon their feelings. The tension between research and teaching also appeared when faculty were discussing work/life balance issues, as mentioned above; however, this section focuses on this precise tension instead

of research and teaching as numerous competing factors in a faculty member's life. Once again, this topic will be divided into themes.

**Institutions send faculty the message that research is more important than teaching.**

**With limited time, it is difficult to excel in both areas.** Though faculty members from all tenure statuses mentioned the importance of research, non-tenure track faculty were quick to recognize they are not required to do research as much as their peers are; this was specifically true at Institution B. Tenure track faculty at Institution B often criticized their administration for pushing the research agenda over teaching; as Juno said, "I'd say the message is much clearer that research is important compared to teaching, which means that if you have a limited amount of time, you're more likely to put your time in research." Pluto, who used to work in administration himself, noted that the balance between the two was especially confused at his institution:

The conflict between teaching and research has never been really reconciled. It's not an accident. It's an accident when a great scholar is a great teacher. That's an accident.

The faculty is convinced that the research agenda tops the teaching agenda. And it may, I don't know. Considering the fact that the one really doesn't have the same talent as the other, unless you get very lucky, I don't know how you reconcile the two. They know the two things they gotta do are teaching and research. How do you become very good in both?



He was often quick to point out how the role of research had evolved immensely in his long career at Institution B. However, he felt that the administration and the board of trustees needed to be clearer about what they wanted the institution to focus on: research or teaching.

The two non-tenure track faculty members at Institution B also talked about this conflict. Venus said:

My boss always says to publish and get grants. The teaching is nice, but publish and get grants...no matter how many wonderful teaching things I have on [my annual report], it just doesn't matter if I don't have grants. I am hearing what she is saying, and I understand I need to not think about A+ level in the classroom because then I end up putting C+ level effort into my research. My summers are just crazy with research.

Despite not having been hired to do research, Venus still felt the pressure. Mars, on the other hand, opted out of doing research: "It's fairly time consuming, if I were maintaining any kind of [other work]. I'd probably have to shift most things into the summer and not teach in the summer. It's just a herky jerk. I know people who do it. I think partly [they do] it by not being available as much to the students...I don't think that schedule would appeal to me."

This divide was less distinct at Institution A, where faculty did not appear to feel as much pressure to do research. Newly-tenured faculty, like Apollo, mentioned the research he had to undertake in order to get tenure, but it was clear that he would now like to devote more time to teaching. Non-tenure track Vesta knew she was not responsible for research, though she recognized how difficult it can be for her peers to reconcile research and teaching: "I'm clinical faculty, so I have a lot of focus on teaching versus research. It makes it a little easier for me, but I know my peers who are responsible for doing research that's a hard balance for them."

Overall, while the tension is apparent in each faculty member's life, it appeared to be more difficult for those faculty at Institution B.

**Faculty believe that research matters in the tenure process more than teaching.**

Only tenured and tenure-track faculty spoke about this, and it was more commonly heard at Institution A. Apollo said, "Over the last few years when I was coming up for tenure, the only thing I cared about was keeping my research up. That was the determining factor; that was the criterion by which my case would be decided." He did not elaborate on where this message came from, but it was clear that he had heard rumors from other faculty members in his department. Speaking from a former administrative standpoint, Neptune noted, "Teaching was one of the lesser qualifications for tenure here. It's publishing first, then teaching, and then lastly service. I was chair for 15 years, and the people who went up for review, that was the focus, research." These findings are interesting in comparison to those found in the last theme, where faculty at Institution B appeared to feel more pressure to do research than those at Institution A. This overall theme relates to messages and communication from the institution and administration in terms of what they want their faculty to focus on; if faculty believe that research is more important in the tenure process than teaching, they will be less likely to attend professional development activities.

**Teaching only has to be at the bare minimum in order to succeed in winning tenure and in keeping one's job.** An additional theme that developed from this topic was that faculty repeatedly noted the sentiment that teaching only had to be at the "bare minimum." This was mentioned by tenured faculty, tenure-track faculty, and non-tenure track faculty. Apollo had recently gone through the tenure process, and he said:

You have to teach at a minimum competency. The research is 90% of the [tenure] case, though. Nobody ever pretended it wasn't that way. Everyone was always very clear to me. They do say very explicitly, 'as long as your teaching doesn't raise any red flags, then don't worry about it. Don't try to perfect your courses. Get your books out [i.e. publish].'

He was specifically told this message by those in his department; Neptune, a former department chair, also echoed this sentiment. Diana, who was at the same institution as Apollo and Neptune, said, "As long as people aren't complaining about your teaching, you are fine. You just have to do the bare minimum to get by."

At Institution B, where research appeared more critical than teaching in general, faculty felt the same way. However, the issue was more pronounced among non-tenure track faculty at Institution B than A. Venus, not on the tenure track, said:

I have NO knowledge of this because it's a completely non-transparent process – but what I have heard through the grapevine is that [the administration] don't care at all about your course evaluations unless you score below a certain level. In that case, they'll fish them out and say, 'What's going on with this person?' Other than that, I have heard they don't really care. If you're getting two big grants a year, they're not going to fire you. You basically have to care yourself whether your students enjoy your class and whether they can learn and whether you're providing a service.

In essence, even those not on the tenure track felt that they did not have to be excellent teachers in order to keep their jobs.

**Some faculty care equally about research and teaching, and some professional schools pay more attention to teaching than research.** Some faculty, specifically females in the social sciences, care equally about teaching and research. Venus, Minerva, Vesta, Juno, and Ceres all spoke about their love of teaching. Venus said, “Many other faculty are like, ‘research! And, oh yeah, I have to teach.’ But you can be excited about both. I am genuinely excited about both.” Ceres and Juno went to great lengths to improve their teaching, especially when they got into ruts, yet they both were also extremely interested in their own research. Though the males who were interviewed also expressed an interest in teaching, none of them spoke about it as often as the females.

Similarly, the professional schools seemed to differ from Arts & Sciences in that the faculty there noted how important teaching was to the administration. Jupiter specifically said, as noted above, that teaching is crucial in business and law schools. Vesta spoke about how much the administration at her nursing school focused on teaching. Minerva, also at a professional school, stated:

The reality is, however much people are like, ‘oh, all anybody cares about is research,’ that’s actually just BS. Actually nothing about your research is noticed. Nobody notices your research. The only thing that you get evaluated on is this anonymous report [course evaluation] that comes through the system, so teaching feels like the thing that’s the coin of the realm even though everybody pretends that it’s not. Everybody has this thing where it’s not, but it is literally the only thing where you get a metric that tells you where

you compare to everybody else. We live in this mythical world where everybody is like, 'oh, we're in a research university.' The thing you're supposed to say in a research university is nobody cares about the teaching, but actually everybody cares about the teaching, and everybody is obsessed with the teaching. Everybody wants to win the teaching award, and everybody wants to be the most popular teacher and loved by their students because on a day to day basis that's the only people you interact with and nobody notices what you write.

Minerva may appear to be an outlier in this study, but Jupiter made it sound as if he had experienced similar things at the three previous business schools at which he had taught. As he noted, this could be due to the fact that the graduate students at business and law schools are often paying their own way or going into debt for their education. But Minerva's argument that the entire research university actually does care about teaching stands in contrast to what the other faculty interviewed at Institution A said; perhaps she was projecting her view of her professional school onto the institution as a whole.

Only Arts, Sciences, and Engineering faculty were interviewed at Institution B, so it is difficult to compare this particular finding by institution. Yet future research should certainly explore the variations between professional schools and Arts & Sciences.

### **Gender/Age/Race Issues**

Some faculty brought up issues of gender, age, and race in their interviews. Sometimes they talked about this in terms of their students and how these factors affect classroom dynamics and teaching styles. Other times, faculty discussed their own demographics and how they could affect how a faculty member is perceived in the classroom.

**Faculty realize the student population is changing, and they would like more information on how to work with students from more diverse backgrounds, including students with disabilities and international students.** This theme was confined to mostly female, tenured and non-tenure track faculty members in the social sciences, specifically those who had taught for a fewer number of years. Ceres, who worked in the field of education, spoke about her changing student demographics. For professional development topics, she said:

I'd like to see a workshop so that we are better able to help those first generation, students of color, to help them negotiate the system because many of them we're seeing, they're taking care of parents. The population is changing, and even our most entitled children are coming with mental illness, they're coming with a lot of issues, and we need to be able to be attuned to that. International students also have a hard time here. We need to understand all the factors that are influencing their performance.

Diana, in the sciences, said that she would like to know more about how her students learn, since it's obvious that some of her methods do not reach every student. Like Diana, Venus had only been teaching for a small number of years, and she noticed similar issues in her classrooms: "Some people can't learn if it's not hands-on. Some people have disabilities and won't benefit from someone just writing on chalkboards." These faculty members expressed a desire to learn more about the backgrounds of their students so that they could more effectively reach out to them in the classroom.

**Faculty know that their own race, gender, age, and appearance affect how they are perceived in the classroom. Some of them worry about this throughout their careers.** Once

again, this theme was primarily confined to females in the social sciences. Tenured and non-tenure track faculty were the most likely to talk about it, though the participants crossed a range of disciplines and both institutions. Minerva was the most willing to discuss how she felt her gender and age played a role in her teaching; specifically, she said:

As you get older your teaching evaluations go down. I work much, much harder now than I did when I was younger to seem not old. To seem not irrelevant in the classroom. I think that young people like young people. As I've gotten older my teaching style has changed. I'm a much more effective teacher now than I was when I started even though I got high evaluations, but they were kind of fake. They were fake from being young.

Venus also spoke about her age in the classroom, since she had only recently finished graduate school and started teaching. She felt it was important to project a sense of command over the classroom so that students would not see her as "one of them."

Female faculty also spoke about their own gender in the classroom. Minerva felt that her gender often caused her students to give her less positive teaching evaluations than her male counterparts. She said:

They've done these studies that show that people basically decide within the first five minutes of the course whether they're going to like your course or not. So if you're a young person who comes in, if you're an attractive person, if you're a white man who looks like what you're supposed to look like, those five minutes go in your favor. As you

get older, if you're a woman, if you're a person of color, those first five minutes have gone against you.

Being a female in a traditionally male-dominated field also caused Minerva to think about these issues more than a female in a female-dominated field might. She began teaching in a professional school in the 1990s, and she noted, "In my early classes, there were some really awful things said. Really awful, mean, mean, mean boys, which is what I would call them. People write that stuff all the time. 'She's ugly. She doesn't wear the right clothes, her clothes are horrible. Why did she change her hair in the middle of the semester?'" She specifically said that she knew of male colleagues who found these issues hard to believe. They were unable to understand the experience of being a female faculty member in a classroom dominated by men. Interestingly, the male faculty members did not speak about gender dynamics among their students in the classroom. Female faculty, particularly those of color, are often treated differently than their colleagues in the classroom. Often their authority is resisted and their competency is questioned, most typically by white, male students (Astin, 1993; Balderrama, Teixeira, and Valdez, 2004; Hurtado, Milem, Clanton-Pederson, and Allen, 1998; Pittman, 2010). This is in keeping with the findings of other studies that typically show female faculty are less satisfied with their day-to-day working environments than male faculty (Altbach & Lewis, 1995). Minerva and Venus experienced many of these issues in their classrooms and spoke about them in interviews, while other female faculty who were interviewed did not explicitly discuss it.



### **Conclusion**

The last chapter will continue to answer the research question more fully by expanding upon faculty members' perceptions and preferences about professional development for each demographic group in light of the theoretical rationale. Bronfenbrenner's (1979; 1993; 1995) ecological systems theory will be used to analyze the findings, and a map of faculty members' complex ecologies will be presented. Then suggestions will be made for administrators and professional development facilitators that will aid in designing professional development programs that might better suit faculty members' needs and ecologies. The limitations of the study and suggestions for further research will be discussed toward the end of the final chapter.

## **CHAPTER VI: Discussion and Conclusion**

### **Introduction and Road Map**

This final chapter begins by briefly summarizing the findings reported in chapters IV and V, while interpreting them through the lens of Bronfenbrenner's (1979; 1993; 1995) ecological systems theory. It also relates these findings to the research question that guided the study. The discussion of the findings provides a larger context for the study's outcomes in relationship to previous studies and literature in the field. Next, the limitations of the study are presented, followed by implications for practice and policy. Finally, the chapter ends with recommendations for future research in this area.

### **Summary and Discussion of Findings**

The overarching research question presented in chapter I was: What are faculty members' attitudes toward and perceptions of professional development programs for teaching on campus? Subquestions included: 1) How might these attitudes and perceptions affect individual participation? 2) What type of professional development for teaching would faculty like to attend and see offered on their campuses? 3) How, if at all, do faculty demographic characteristics and professional contexts affect their attitudes and perceptions?

Overall, faculty view professional development somewhat positively, though most do not view it as a top priority in their busy lives. They often cited lack of time as the reason for not participating, though there were some survey respondents who said they did not participate because they felt they were already excellent teachers. These attitudes and perceptions ultimately affected their participation; individual characteristics that also affect participation will be discussed in further depth below. With respect to format, faculty would most like to see brief

sessions that address a specific need they have in the classroom, and some faculty members, specifically women, would like to participate in ongoing, semester- or year-long learning communities. Collaboration with other faculty, as well as food and other incentives from the institution (such as stipends, promotion, and tenure rewards), are the major factors in enticing faculty to participate. Women and non-tenure track faculty are statistically significantly more likely than males and tenured and tenure-track faculty to have participated in and to hold positive views on professional development for teaching.

As mentioned in Chapter I, the findings of this study can be usefully analyzed via Bronfenbrenner's (1979; 1993; 1995) ecological systems theory. This theory takes into account the multiple—sometimes competing—factors in an individual's life in order to make sense of their relationship to their multifaceted environment. Also known as Person-Process-Context-Time theory, this model places the individual in the center of his/her microsystems (job, family, etc.), mesosystems (the interactions between one's microsystems), exosystems (institutional policies, structural issues, etc.), and macrosystems (societal expectations, cultural norms and values, etc.). Across all these systems is the chronosystem, which covers historical events and the time period in which one is living as well as one's stage in life.

The survey and interview data together highlight the numerous competing factors for a faculty member's time and attention. When relating these findings to Bronfenbrenner's (1979; 1993; 1995) theory, it is possible to see how faculty members in higher education today are facing competing systems that can drive them in different directions. Their environmental interactions have an effect on their personal growth and development, which can therefore affect an individual's perceptions and behaviors. The competing and conflicting forces determine how faculty negotiate their personal lives, their classrooms, their institutions, and their disciplines;

ultimately these systems have shaped faculty members' attitudes and perceptions about teaching and professional development.

### **Individual**

The factors that affect a person as an individual are one's demographics and developmentally instigative characteristics, which are "personal qualities that invite or discourage reactions from the environment...that can disrupt or foster processes of psychological growth" (Bronfenbrenner, 1993, p. 11). These characteristics also encompass a person's selective responsivity, or the responses and attraction one has to physical and social environments. An individual's beliefs are also part of his or her developmentally instigative characteristics. In terms of faculty members, one's developmentally instigative characteristics affect the way one behaves in the classroom, the way in which one relates to students, and the attitudes one holds about professional development and teaching in general.

Demographically, the survey data demonstrated that there were no significant differences among faculty members of different disciplines or institutions. Gender was the most significant demographic in the survey data, where female faculty members were statistically significantly more likely to have attended professional development in the past and more likely to say they would attend in future. Statistically significant differences were also found according to tenure status, where non-tenure track faculty were more likely to say they would attend professional development in future. They also said they would be willing to attend more often than their tenured and tenure-track counterparts. Like female faculty, non-tenure track faculty were statistically significantly more likely to find professional development useful and to say that teaching development is underemphasized at their institutions. Overall, female faculty and non-

tenure track faculty members had similar attitudes and preferences about professional development for teaching.

Only one statistically significant demographic difference was found in the survey data that related to a faculty member's age: Younger faculty believed that teaching development was adequately emphasized on campus. Younger faculty had experienced more teaching training during their time in graduate school than faculty over 40 years old, and these two findings are probably related. Since younger faculty have had more exposure to teaching development programs, they are likely to believe that it is appropriately emphasized. This not only relates to faculty characteristics on a microsystem level, but also on a chronosystem level, where graduate programs have started to promote teaching training more in recent years.

Therefore, on an individual level, gender, tenure status, and sometimes age are the most relevant demographics that affect how a faculty member feels about professional development. Females, those who are non-tenure track, and younger faculty have stronger feelings about their attendance and the way in which professional development is valued on campus. These findings can be elaborated upon by the interview data, where faculty like Juno, Ceres, Vesta, and Venus explained that they deeply valued professional development and wished that more people on campus would attend. Recognizing how attending sessions could help faculty better reach their students, Ceres noted how the student population has been changing to include those with mental illnesses and other pressures to which faculty should be attuned. The male interview participants, on the other hand, did not speak about valuing professional development as often as the females did, and they rarely discussed the changing student demographics. Perhaps this has to do with the way in which females are socialized to care more about others; Carol Gilligan's (1977; 1993) work on the moral development of women presents the notion that men tend to

focus on the ethic of rights while women tend to abide by an ethic of care, which centers on relationships and responsiveness. Her work demonstrated that women's ethic of care is their moral compass that guides their daily practices (Evans, Forney, Guido, Patton & Renn, 2009). The findings in this study seem to reaffirm Gilligan's (1977; 1993) theory, as females talked more about caring for their students and finding ways to reach struggling groups than their male counterparts did. Gender, as an individual characteristic, ultimately affects faculty members' developmentally instigative characteristics as well, since these findings show that females in this study respond differently to their classroom environments than males do.

Interviews with younger faculty, for the most part, showed that they did in fact experience more teaching development while in graduate school. Apollo and Diana both took part in programs that focused on teaching, and this helped instill in them a desire to keep attending professional development sessions once they became faculty members. Faculty who had been teaching for a longer period of time, like Neptune, Jupiter, Ceres, and Pluto, specifically said that they had no teaching development while in graduate school. These individual and developmentally instigative characteristics ultimately shape the way in which faculty perceive professional development, as younger faculty's previous exposure to teaching development helped foster the ways in which they respond to the physical and social environments of professional development.

Individual characteristics also mold the way in which people view their own identity. Those with higher levels of cognitive complexity would be able to view their role as a professor as comprised of multiple different constructs that all relate to one another. On an individual level, faculty must negotiate the relationship they have to their various roles; in terms of professional development, this means that faculty have to make meaning of the way in which

they relate to their teaching and their efforts to improve it within the entire matrix of their roles and relationships, including both researcher and teacher. Kegan's (1994) orders of consciousness explain the development of people's thinking over time; by the time a person has reached the fourth order, in which they achieve self-authorship (which, for some people, might never happen), they would be able to view their teaching as an object of reflection and analysis, rather than as synonymous with who they are as a person. If faculty have reached self-authorship, and can in fact view their teaching in this way, they are hypothetically more likely to attend professional development programs because they are willing to treat their teaching as something that can be improved upon and critiqued without threatening their identity. Those that are in the third order of consciousness, where people are critically concerned with how they are perceived by others, would be more likely to be defensive of their teaching because they view it as a part of their identity; critiquing their teaching methods would be equivalent to critiquing them as a person. The more cognitively complex faculty members in this study were those who were able to detach themselves from their teaching and view it as an object, like Vesta, Ceres, and Juno. These were the faculty members who were likelier to speak about professional development as a microsystem in their lives; they often also discussed the complex roles they held both personally and professionally. Faculty who are able to make sense of their competing roles and responsibilities therefore experience their ecologies in ways that support developmental growth; however, only a small number of faculty members in this study appeared able to attempt this difficult task.

**Microsystem**

On the microsystem level, it is important to take into account a faculty member's specific job, including his or her workplace, department, colleagues, students, mentors, and research.

One's microsystem also includes family, home life, neighborhood, friends, and anyone else with whom he or she interacts on a regular basis. The survey and interview questions did not specifically ask about faculty members' lives outside of work, but many of them touched upon this topic in the interviews or short answer survey questions. More than once, faculty spoke about their multiple roles in terms of being a teacher, a researcher, and a spouse and/or parent. When talking about the potential of balancing research and his teaching, Mars said, "It's just a herky jerk." Some faculty, like Ceres and Neptune, held other positions at the university while also being a faculty member. These extra job responsibilities represent an additional microsystem for them to balance.

Other microsystem factors include the way in which faculty work within their departments, with colleagues, and with students. Most faculty in the interviews referenced their department and department chairs only when talking about the value these place on teaching and professional development; in most cases, department chairs did not express great interest in professional development attendance, and this could potentially shape the way in which a faculty member views his or her own participation.

In contrast, most faculty members said that attending professional development programming would have a positive effect on their students, another microsystem in their ecologies. The desire to learn techniques in order to improve one's teaching may conflict with the messages that faculty members are receiving from their department chairs and colleagues about the greater value placed on research productivity. Faculty must negotiate this tension, where they want to excel in the classroom to help their students, but they feel that spending too much of their time working on their teaching could negatively impact their relationships within their department. These types of interactions result in a strained mesosystem.



**Mesosystem**

The mesosystem is made up of the interactions among one's microsystems. Most importantly, the mesosystem contains the effects that these interactions might have on the development of the individual, since these effects can either promote or inhibit growth (Bronfenbrenner, 1979; 1993; 1995). For faculty members, the mesosystem is comprised of the relationship between their workplace and their families, for instance, or the interaction between their research and their students. The balancing act that faculty members conduct in wearing their multiple hats was best summed up by Neptune: "They're trying to keep up with papers, recommendations, classes, family obligations, so it is a juggle. I mean, you're juggling all these factors and you say, 'what's the most important?'" Many survey and interview participants referenced their lack of work/life balance, which often caused them to miss attending professional development activities.

In the example mentioned above, faculty members know that their students and departments have different priorities. Faculty want to help their students by attending professional development and learning how to create more exciting PowerPoints, for example, but they also realize that department chairs might prefer them to spend that same time focusing on research instead. These expectations cause faculty members to be pulled in different directions while trying to succeed in two very important microsystems.

Faculty who spoke about the tension in research versus teaching were outlining the struggle they felt in their mesosystem. Juno said, "The message is much clearer that research is important compared to teaching, which means that if you have a limited amount of time, you're more likely to put your time in research." Venus felt like it was not possible for her to excel in both areas of her life: "I need to not think about A+ level in the classroom because then I end up

putting C+ level effort into my research.” It was clear that this balance had an effect on these women, who each wanted to excel as both researchers and teachers but found it nearly impossible. Interestingly, the tension between research and teaching was more profound at Institution B, where both Venus and Juno worked. Pluto also referenced the schizophrenic nature of the administration, which seemed unable to decide if it should promote research or teaching more. Perhaps this was a tougher balance at Institution B because it has a higher Carnegie classification rating for its research productivity. The prestige and rating of one’s institution, which would be exosystem factors, can trickle down to a faculty member’s mesosystem by dictating what the institution values. The tension in the administration’s view of the balance between research and teaching, caused by increasing national prestige and growing research output, caused faculty members to feel the same tension in their own mesosystems.

Faculty who held other jobs, like department chair or assistant dean, had even more complex mesosystems. Ceres wanted to attend professional development programs, but any spare time she had was devoted to her additional responsibilities as assistant dean. Some faculty members also serve as journal editors or reviewers, while others hold roles within their professional organizations. Mixing competing work roles and priorities also leads to increased tension in faculty mesosystems; this could result in hindered development on a professional level. Faculty who wanted to attend certain activities to aid in their teaching were often not able to because of their myriad responsibilities, and they therefore could not focus on this aspect of their own professional growth as much as they might like. Ultimately, this could have a negative impact on faculty members as well as their students. Faculty might recognize the need for improvement in a certain area of their teaching, but the conflicting mesosystems of students, departments, research, and other work-related jobs might cause them not to be able to take

advantage of professional development that might help them in the classroom. Instead of being encouraged to pay attention to their own needs and desires, which would enable them to develop themselves both personally and professionally, faculty members' mesosystems encourage them to take on more work and responsibilities, leaving no time for growth and development.

It is important to note that the lack of time is not the major issue in this study. Though limited time is what faculty members referenced most, the more salient point is that they were receiving messages that teaching matters less than their other priorities. It was not always conflicts or timing that led faculty not to attend professional development sessions. When given the choice between different microsystems, they chose the one that they perceived mattered more. Due to messages from the institution and colleagues, faculty felt that research mattered more than teaching, and therefore professional development was always the first thing to be passed over in favor of other responsibilities.

### **Exosystem**

One's exosystem is made up of larger systems and institutions that have an impact on one's daily life in a more indirect manner. For most people, these systems and institutions involve policies of one's workplace, medical issues and policies, family members' work/school policies and systems, the mass media, the government, social networks, etc. For faculty members in higher education, the institutional policies of the university exist in the exosystem. Most notably, these include tenure, promotion, and review procedures, sabbatical and leave policies, the academic calendar, insurance, salary, and benefits, etc. Faculty typically belong to national disciplinary societies, which are also part of their exosystem, as is the culture and role of higher education in America. In terms of professional development, the overall agenda of an institution and the administrators involved in creating it are part of an individual's exosystem.

Therefore, at this level, an institution can influence the microsystems and mesosystem of a faculty member by the types of programs it creates and the specific messages it develops related to an institutional policy for teaching development.

Many faculty members in both the surveys and interviews referenced the degree to which professional development and teaching are apparently valued by the administration, which demonstrates how the institution's view of teaching and professional development is an element of the exosystem that ultimately impacts faculty. As Ceres said, "If it were valued on the annual review I'm sure more people would go." Apollo agreed that teaching and professional development were not a major variable in whether he got tenure. The message he received from his colleagues and chair (in the microsystem level) was that the administration (at the exosystem level) was not concerned with his attendance at professional development programs. Therefore a school's administration has a direct impact on both faculty perceptions and participation; if faculty sense the administration does not value professional development, or teaching in general, they will not prioritize time for activities that will improve their teaching.

Hiring and tenure policies, which occur on the exosystem level, also had an impact in how faculty members viewed professional development. Faculty who were hired into non-tenure track jobs were statistically significantly more likely to say they would attend professional development in future, and they were more likely to find professional development useful. They also found teaching development to be underemphasized at their institutions. The interview data further emphasized this, as the non-tenure track faculty discussed how highly they valued teaching. Since non-tenure track faculty spend more time teaching than doing research, it makes sense that they would devote more energy to attending professional development. In some cases, like with Venus, these faculty might also be hoping their jobs will eventually turn into tenure-

track positions. By taking part in professional development and involving themselves in the university at their own exosystem level, non-tenure track faculty are often trying to prove their worth to the institution. This was especially true of Mars, who was highly critical of his administration's treatment of lecturers as "cogs in a machine." Noting the rise in non-tenure track, full-time faculty, he said, "Now you've got a staff who are almost completely justified based on their interactions with students and their ability to teach, and I think it places a huge responsibility on the institution to define what it means by teaching."

The overall place of higher education in American society, specifically in regard to teaching, also affects faculty on an exosystem level. Faculty know that their disciplinary societies, as well as their institutions, value the production of research. However, they also are exposed to the national critiques surrounding the rising cost of college tuition. The mass media, also in one's exosystem, exacerbates this sentiment by continually publishing articles about the value of a college education and whether students are learning anything useful. In some cases, this can make faculty more eager to prove themselves in the classroom; in other cases, it may make them less eager. Either way, the national discourse puts a spotlight on both the content and the manner in which faculty teach, which adds another level of tension to faculty members' already disjointed ecological systems. Faculty members who pay attention to this national debate may have internal conflicts over the usefulness of their jobs. This relates back to their cognitive complexity and the view of themselves as a faculty member. They might question whether they are actually helping prepare students for their future lives, whether what they are teaching is worthwhile and important, or whether (if they are paying attention to the more critical media) their institutions are merely robbing families of thousands of dollars. This internal

struggle can exacerbate faculty members' anti-developmental ecologies since it can cause them to question the very purpose of their life's work.

Their cognitive complexity levels, however, can help them negotiate these tensions. Faculty who have achieved self-authorship, according to Kegan's (1994) theory, have internally delineated principles by which they live their lives. These principles help them relate to and prioritize their competing roles, even when they appear contradictory. Faculty at this level of cognitive complexity would understand why they do what they do; meaning, if they became faculty members for the joy of teaching and working with students, they may have developed an internal structure that guides them to value teaching over research. However, for faculty members who have not reached this level of self-authorship, struggles and tensions in their ecologies could lead to crises and self-questioning.

### **Macrosystem**

An individual's macrosystem is made up of societal expectations, cultural values, norms, and beliefs, along with those of any subcultures to which the individual belongs. The macrosystem also consists of formalized laws and regulations, as well as any other economic, social, educational, and political patterns. For faculty members, cultural norms and values related to gender, age, research, teaching, and the role of higher education all play a part in the way in which they balance their competing priorities. One's gender, as the survey and interview data demonstrated, is a major factor in predicting a faculty member's perceptions of professional development and teaching. Some females, like Venus and Juno, recognized that teaching can be seen as 'softer' than research and therefore inherently associated with females instead of males. Minerva also spoke about the differences between males and females in the classroom; she specifically referenced the role that culturally held stereotypes of gender, race, and age played in

the classroom. Faculty members who are aware of how their gender affects their teaching and their students' perceptions of them are more susceptible to anti-developmental ecologies, as they are more likely to be women who are struggling not to conform to gender stereotypes. The added complexities of societal expectations, norms, and stereotypes can make a faculty member's time in the classroom even more difficult. In addition, it could compound the tension between research and teaching, especially for women, as they try to dispel the commonly held notion that women are less strong in the area of research. Recent studies have shown that women are more likely than men to receive teaching awards in institutions where research is valued more than teaching (Butcher & Kersey, 2015). Women in this study clearly understood the stereotype that females are stronger in teaching, while at the same time, they were struggling with macrosystem ideologies that held that women are relational and nurturing. Women and men are socialized within this set of socially constructed gender roles and expectations. This relates back to the ethic of care discussed earlier; women might be drawn to caring for their students, but some of them might feel that they cannot spend too much time working on their teaching and caring for their students for fear of not being taken seriously as researchers.

American society typically values youth over older age, as Minerva noted, and therefore she felt that older faculty members were not seen as positively in the classroom as their younger colleagues. This relates to another macrosystem factor, the end of mandatory retirement for faculty members over age 70. In 1986, the Federal Age Discrimination in Employment Act was passed by Congress; this dictated that as of December 31, 1993, faculty in higher education were no longer subject to mandatory retirement due to their age (Weinberg & Scott, 2013). As a result, an increased number of faculty have continued working into their 70s and beyond; this impacts both their colleagues and their students, as well as their institutions, which have had to

develop new policies to accommodate this shift in recent years. As Pluto noted, more non-retiring faculty directly led to the overabundance in adjuncts and full-time lecturers, as senior faculty stay in their positions while teaching fewer courses. This phenomenon has increased tension between tenured faculty, non-tenure track faculty, new Ph.D.s, and administrators, ultimately affecting the way in which classes are distributed among instructors. When senior faculty stay longer and teach fewer courses, it causes junior and non-tenure track faculty to take on additional course burdens (Altbach, 2011). For tenure-track faculty, they are unable to devote significant time to planning and redesigning their classes, as they also have to spend time on research in order to gain tenure. New Ph.D.s, who often start out as part-time or visiting faculty in a department, are in an even worse situation because they might have to cobble together multiple part-time jobs to survive, while at the same time trying to produce research and applying for more permanent positions. It is nearly impossible for them to devote enough time to teaching, and even less likely that they will attend professional development sessions. This relatively recent phenomenon of late-retiring faculty has made already difficult ecologies even more challenging for faculty members and departments, resulting in new tensions that did not exist twenty years ago.

Numerous other macrosystem factors can affect faculty members' development. The survey and interview did not specifically ask about individuals' personal lives, but a few participants referenced the balance between work and their home lives. People's home lives are subject to cultural and societal norms, especially for women, who have often grown up in a society where females traditionally stayed home. Not that long ago, American higher education was male dominated; many of the nation's premier institutions did not even admit female students until the 1970s. Therefore, it is especially difficult for female academics to reconcile



their place in the academy when they are one of the first generations to be accepted. Other cultural norms and expectations may affect faculty that belong to varying ethnic or other groups; however, these were not discussed in interviews.

### **Chronosystem**

The chronosystem relates to both the current time period and one's stage in life. The previous discussion of the place of women in the workplace and in the academy also affects the chronosystem as an individual experiences it. One's age or stage in life can relate to their perceptions of professional development in terms of how they have previously experienced teaching development: the survey data showed that younger faculty believed that teaching development was emphasized the right amount on campus. Younger faculty had also experienced more teaching training during their time in graduate school than faculty over 40 years old. Because of their stage in life in relation to the overarching chronosystem, younger faculty may have had more exposure to professional development for teaching, as it only began being emphasized on campuses in the last few decades. The older faculty interviewed, like Pluto and Neptune, for example, had both been teaching for longer than many of the younger interviewees had been alive. Therefore, the younger faculty were in graduate school and beginning their careers as professional development for teaching was becoming more formalized. Ultimately this affected their perceptions of teaching and development programs, causing them to find it appropriately emphasized, as they have had more exposure to it. Older faculty were more likely to say teaching development was undervalued on campus. This could be because they had not taken part in as many programs as the younger faculty did, and older faculty would not have been exposed to the relatively recent push for teaching training while they were in graduate school.

This is one specific example of how the chronosystem can affect faculty perceptions of professional development. There are other chronosystem factors that affect different subgroups, such as the rise in non-tenure track faculty that has been occurring in recent years, as well as chronosystem factors that affect ethnic groups in terms of immigration and education. For females, the pressures associated with fertility and childbearing age would be a chronosystem factor, as well. Another chronosystem factor is the relatively recent increase in two-spouse working families in academia, where both members of a couple work full-time. This often leads to a two-body problem in academia (see Wolf-Wendel, Twombly & Rice, 2003), which may be an issue for many of the faculty in this study. Even without spouses in academia, faculty with working spouses face issues trying to juggle childcare, eldercare, and household duties. Damiano-Teixeira (2006) conducted a study of female faculty members in three types of higher education institutions to assess the complexity of their conflicting roles using multiple role theory. She found that competing family and employment roles were sources of both positive and negative stress for these female faculty. While these personal situations were not discussed much in interviews, they certainly impact a faculty member's ecological development.

On a more basic level for faculty members, chronosystem factors include the academic calendar, the scheduling of classes, and the scheduling of professional development sessions. It also includes the changes in the academic labor market that have resulted from hiring freezes, the economy, late-retiring older faculty members, and the backlog of unemployed Ph.D.s. This backlog of unemployed Ph.D.s means that faculty positions are highly sought after, so new faculty are faced with higher standards to reach when they are on the market. They are competing with more and better qualified applicants than ever before. By the time the lucky applicant secures a job, he or she is already stressed and tense from having gone through the

typically arduous process. This chronosystem factor of the academic job market impacts tenure-track and non-tenure track faculty the most, adding increased burdens to their personal ecologies that can also negatively affect their perceptions of professional development.

The map below is based on Bronfenbrenner's (1979; 1993; 1995) ecological systems theory. It illustrates the levels (individual, microsystem, mesosystem, exosystem, macrosystem, and chronosystem) for a typical faculty member at Institution A or B. It is a generalized view of some of the factors that these faculty said they experienced in both the surveys and interviews, and it demonstrates the numerous tensions that exist in the ecological systems for these faculty members. Not all possibilities have been listed on the map, but it is meant to give a general overview of the types of factors faculty experience that affect their development.

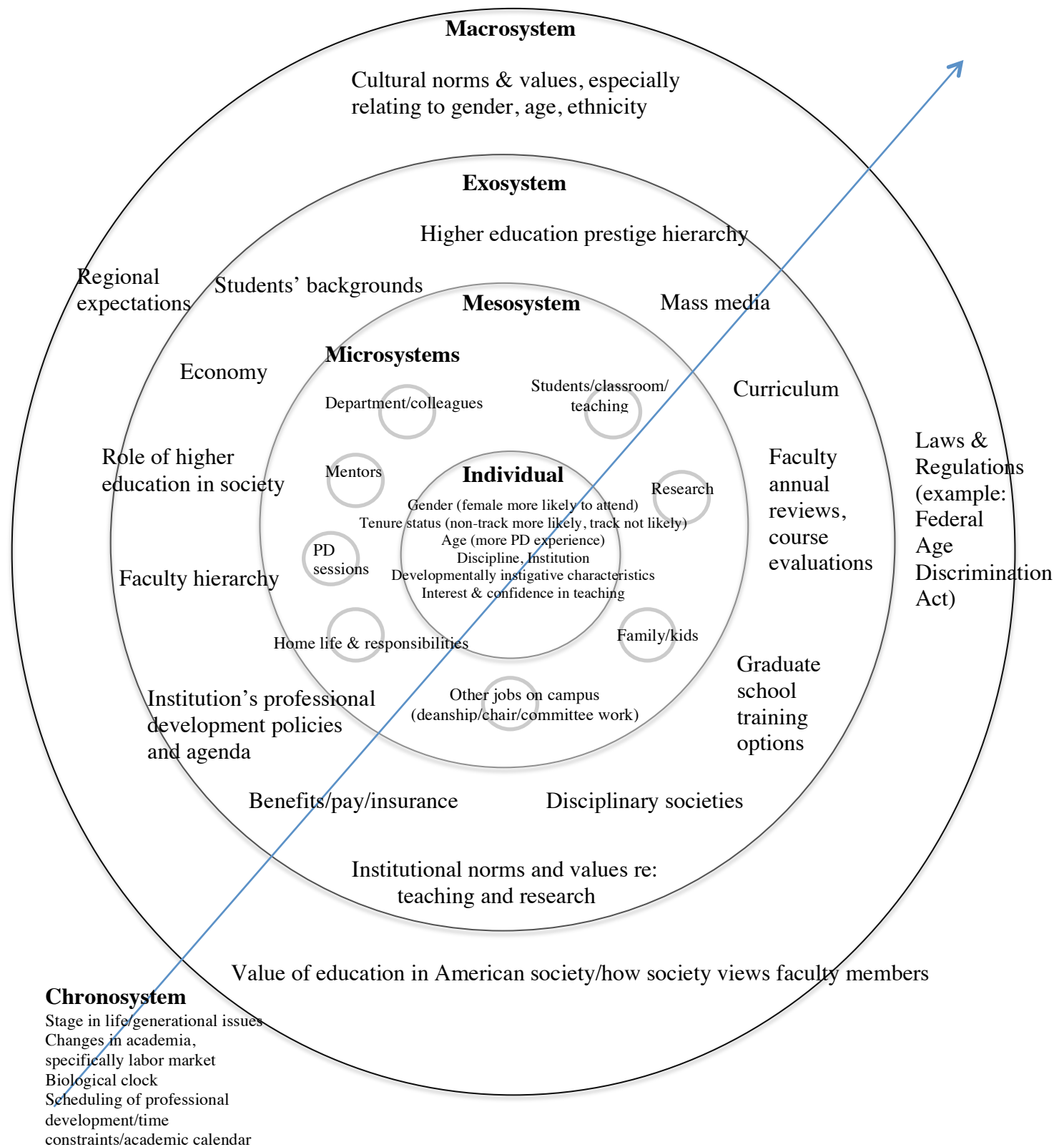


Figure 13. Bronfenbrenner ecology map for faculty study participants.

**Discussion**

The lack of a coherent and manageable mesosystem can result in strained development for faculty members both as academics and as people. The survey and interview data showed that they are being pulled in numerous different directions, especially at the mesosystem level, which is both incongruent and overloaded. As Bronfenbrenner's (1979; 1993; 1995) theory illustrates, this results in an anti-developmental ecological system. An anti-developmental mesosystem resulting from competing pressures can stunt growth and inhibit positive relationships between one's micro-, exo-, and mesosystems, ultimately causing conflict for the individual. Most faculty members recognize the gender, age, racial, and hierarchical issues that affect teaching, research, and other institutional policies; they also realize that they face a difficult situation in which they are called to precariously balance competing microsystems resulting from multiple exosystems. The most notable tension they discussed was the pull between research and teaching. Microsystems such as their department chairs and students emphasized research or teaching, while exosystems such as the administration and disciplinary societies often only valued research. However, faculty are also exposed to the national conversation around the value of higher education that highlights teaching and the performance of faculty members in light of cheaper alternatives online. This anti-developmental ecology leads faculty to construct their own opinions about professional development for teaching, where the overall result is that they generally value teaching and want to succeed in it, but they know that they are evaluated more on their research. With limited time in the day to complete all their various duties, faculty are more likely to devote time to research or specific course, departmental, or family duties instead of attending professional development activities to improve their teaching, which they perceive as less important than their other priorities.

An ecological analysis shows that the current role professional development plays in faculty members' harried lives is problematic on many levels. Without major structural change, specifically at the exosystem level, the problem is likely to persist. On an institutional level, significant changes can be made to reward structures, graduate student preparation for teaching, and departmental and school cultures that would all heighten the value placed on professional development for teaching. Administrations can incentivize attendance at professional development by using stipends, and more importantly, they can reward attention paid to teaching through the annual review, promotion, and tenure processes. They can make clearer the role that teaching plays in these structured reviews, while at the same time specifically stating that faculty who make efforts to improve their teaching will be looked upon favorably. These changes would help send a message to faculty that teaching and professional development are important.

Secondly, graduate schools should put more emphasis on training their doctoral students to teach, as the majority of them will be applying for faculty positions. This can be done via workshops, teaching certificate programs, enhanced opportunities for teaching, and stronger mentoring from faculty in the department who excel at teaching. Starting professional development at the graduate school level, the findings of this study suggest, will lead to sustained participation in development programs over faculty members' careers.

Thirdly, department and school cultures can change by taking cues from the administration. Once the administration makes policy changes, departments and schools can more effectively communicate the importance of teaching and professional development to their faculty members on a microsystem level. Teaching centers, program facilitators, deans, and department chairs can recruit faculty to participate in these programs through advertisements, emails, and word of mouth. Department chairs can talk about the importance of teaching and

attendance at professional development in department meetings, while teaching centers can market themselves in ways that will better reach faculty and meet their needs. Departments can also communicate the varying tasks that faculty members are responsible for in particular contexts, meaning they can pay more attention to the ways in which a faculty member's mesosystem becomes overloaded. For example, departments can do a better job of recognizing the competing microsystems of teaching, research, students, additional jobs, home lives, etc., and appropriate messaging about these areas can be communicated to faculty members by their department chairs.

The findings of this study show that faculty experience their exosystem factors via messages in their micro- and mesosystems. They then internalize these messages based on their own developmentally instigative characteristics and individual identities. At the individual level, they make sense of their complex roles and responsibilities based upon these characteristics and their own level of cognitive development. Faculty are deeply influenced by the messages filtering down from their exosystem, particularly those emanating from the institutions at which they work. However, they must determine their own personal balance between their competing personal and professional microsystems, which is also influenced by the chronosystem. The findings demonstrated that the chronosystem can affect faculty perceptions of professional development depending upon how much exposure to teaching training faculty have had in their past; it can also determine a faculty member's socialization into the profession in terms of how far along they are in their careers and the time period in history during which they entered academia. The faculty member is also influenced by macrosystem views of gender, age, and race that are expressed in the exosystem via policies like the tenure clock and the increase of females in higher education. As some faculty members in this study pointed out, macrosystem

tenets can filter into the classroom at the microsystem level and are then internalized by individuals based on their personal characteristics.

This analysis points to the fact that major structural change at the exosystem level needs to occur in order to demonstrate to faculty that professional development for teaching is valued by their institutions and worthy of their already-scarce free time.

### **Context of the Findings**

As the literature review in chapter II showed, the place of teaching in American higher education has varied greatly over time. Programs for teaching training during graduate school were not widely discussed until the 1960s, and the idea to view teaching as an area of scholarship did not gain traction as a movement until the 1990s. Around the turn of the 21<sup>st</sup> century, teaching centers and professional development programming started developing on college campuses; however, the literature shows that the United States still lags behind many other countries in this area (Gibbs & Coffey, 2004; Trowler & Bamber, 2005). This relative newness might help explain why professional development for teaching is not yet ubiquitous on campuses, though the time has come for administrations and faculty members to pay more attention to teaching and its development.

The literature review also demonstrated the fact that there have been very few studies done on faculty perceptions of professional development for teaching. Of the ones that do exist, the majority do not use a mixed methods approach, and none specifically focus on faculty across multiple disciplines at a research-intensive university. In addition, the few studies that have been conducted gathered data from faculty who have already elected to participate in professional development programs, or, in the case of the UK in particular, faculty who have been required to



participate in such programs. The goal of this study was to examine the preferences of *all* faculty, including those who have not participated in professional development, in order to understand their attitudes toward the topic. Taking a mixed-methods approach enabled a broad range of faculty members' opinions to be analyzed statistically while enhancing the findings with richer, qualitative data from select participants. These findings can therefore help create more attractive and ultimately better-attended programming on campus.

The findings of this study, for the most part, are in keeping with the current state of literature in the field. Most faculty surveyed (82.5%) believed that “great” or “some” importance should be placed on professional development programs for teaching, while a majority believed this type of programming would be useful to them. Overall, the literature on professional development agrees that it would be beneficial to both faculty and academia (Gibbs & Coffey, 2000; 2004; Healey, 2000; Kucsera & Svinicki, 2010; Van Note Chism & Szabo, 1998). Most faculty in the study (86.4%) said that their administrations should be “extremely” or “somewhat” involved in promoting teaching development on campus; the literature also agrees that the message about the importance of teaching and its development needs to come from the institutions themselves. However, the literature goes further to say that the status of teaching in higher education needs to be raised by reframing the way in which it is discussed and viewed by both administrators and faculty members (Kucsera & Svinicki, 2010; Shulman, 1987; Sorcinelli & Davis, 1996; Van Note Chism & Evenbeck, 2002; Van Note Chism & Szabo, 1998). While faculty agreed, especially in their interviews, that administrations need to do more, most faculty did not go so far as to say that their peers could effect change themselves.

The qualitative data from this study show that most faculty had difficulty balancing their dual roles as teachers and researchers. They often critiqued their administrations for sending

mixed messages about the tension between research and teaching, though overall, the predominant message received was that they should spend more time on research than teaching. The literature in this area, most often written by faculty members, supports that finding; faculty believe that their main job is research (Karagiannis, 2009), and they see professional development as an impediment to faculty members' autonomy (Buchanan, 2011; Akerlind, 2011). Faculty in the interviews discussed how hard it was to make sense of the dichotomous nature of being a faculty member while also referencing the institutional and departmental cultures that helped them navigate the fact that research is generally more valued than teaching. This type of socialization into the academic profession is also discussed in the literature (McLean & Bullard, 2000; Nicholls, 2005), where faculty take cues from their colleagues about how they should manage their time. Once again, the constant pull between spending time on research or teaching and receiving messages that are contradictory point to the need for serious structural change at the exosystem level.

In a similar vein, the findings of this study demonstrate that the reward system in academia has produced an imbalance in valuing research more than teaching, which also supports the literature (Advisory Committee to the National Science Foundation, 1996). Authors like Sorcinelli and Davis (1996) suggested incentives that administrations could offer to promote time spent on teaching such as grants, publicity for exemplary teachers, and awards. Empirical studies also found that faculty perceptions of themselves as being good teachers increased when awards or tenure have been achieved (Chang et al., 2011; Morris & Usher, 2011). The faculty in this study all spoke about how they would like to see attendance at professional development incentivized via stipends, awards, food, and discussion of their participation during annual reviews and promotion and tenure processes. As the literature and

the findings both point out, administrations can and should do more to actively promote and reward professional development participation.

Another major finding from this study was that faculty members received very little teaching preparation while in graduate school, especially faculty who had been out of their doctoral programs for a long time. The literature agrees that graduate school does not prepare doctoral students well for their future careers in teaching (Altbach, 2011; Austin, 1992). An Australian study that investigated the extent to which doctoral studies prepared academics for their future careers in teaching found that a quarter of participants said that graduate school did not prepare them to teach at all, and 30 percent said it prepared them only “a little” (Brew et al., 2011). Both the literature and the findings of this current study demonstrate a clear lack of emphasis on teaching training for doctoral students; new faculty are entering their classrooms with little to no teaching preparation, which ultimately can have a negative effect on their students. Graduate school programs are yet another exosystem factor that affect faculty members’ perceptions of professional development. If administrations were to focus on implementing such programming early and urging doctoral students to attend, it might help raise the level of attention paid to professional development and teaching in general.

Some smaller findings from this study are also similar to what previous studies have discovered. Brew et al. (2011) found that women and lecturers participated in development opportunities more often than men or full professors; this is in keeping with the major findings of this study that showed women are statistically significantly more likely to have gone to professional development than men and are more likely to go in the future. Non-tenure track faculty, which would be equivalent to Brew et al.’s (2011) “lecturers,” were also more likely to participate than tenured or tenure track faculty members. MacKinnon (2003) also found that

clinical faculty had a greater desire to participate in professional development than non-clinical faculty; “clinical” faculty members are generally non-tenure track, so his finding is also in keeping with this study and Brew et al.’s (2011) findings. No other studies exist that examined participation by these demographics, but it is interesting to note that these gender and tenure status findings were so similar.

However, MacKinnon’s (2003) study of pharmacy faculty members’ attitudes towards professional development found that very few respondents had completed formal faculty development programs on their campuses. This study’s findings were dissimilar in that about three-quarters of survey respondents had previously attended professional development activities. This could be an issue of self-selection, where only faculty who had participated in previous programs opted to take this survey because the subject matter appealed to them, or it could have to do with the fact that MacKinnon’s discipline-confined sample actually participates less than faculty across a range of disciplines do.

In addition, Diamantes’ (2004) study of faculty perceptions of promotion and tenure policies found that perceptions differed by the demographic of tenure status and not by gender. It is surprising to note that faculty attitudes did not differ by gender on this topic, while the present study demonstrated that perceptions of professional development differ strongly by gender.

Lastly, this study found some of the main reasons that faculty wanted to participate in professional development were that it involved someone they knew, it was a topic that was useful for them, or because they wanted to collaborate with other faculty across campus. This is in keeping with Duffy’s (2012) findings that community college faculty members chose to attend professional development programs in order to engage with other faculty. However, both sets of

findings contradict Sandford, Dainty, Belcher, and Frisbee's (2011) study of occupational education officers at community colleges that found that stipends and travel expenses would be the most attractive incentive in getting part-time faculty to participate in professional development. MacKinnon's (2003) findings said that the main impetus for pharmacy faculty members participating in professional development was personal improvement. Though these findings differ, faculty in this study did mention monetary incentives and learning new techniques as reasons they would want to attend; yet, utility and collaboration with other faculty were by far the most common responses.

Finally, one note from the literature can have important implications for a particular finding from this study. Coffey and Gibbs' (2004) study found that negative changes took place in a control group that was not exposed to professional development for teaching. Some members of the untrained group saw their teaching *deteriorate* over the course of one year. Faculty in the present study who answered that they would never take part in professional development gave open-ended responses when asked to explain why they would never participate. They replied, "At this point in my career, I have the conceit that there is not much more that I need to know," and "By the age of 72 I have more experience in the classroom than anyone who could teach me." This implies that some faculty members who have been teaching for many years believe there is nothing new they can learn, yet Coffey and Gibbs (2004) showed that teaching skills can decrease over time. Though it would not be possible to change the mind of every faculty member, there should be ways to get the message across to faculty that it is important to constantly reevaluate one's teaching in order to maintain excellence in the classroom.

Overall, the study's findings are in keeping with some previous studies done on similar areas, and the ultimate outcome of the study supports the literature's argument for institutional change in order to raise the level of value placed on teaching in the academy (Kucsera & Svinicki, 2010; Shulman, 1987; Sorcinelli & Davis, 1996; Van Note Chism & Evenbeck, 2002; Van Note Chism & Szabo, 1998). It is evident that the current ecology of a faculty member's life is anti-developmental, and teaching and professional development will continue to be undervalued without major change in higher education.

### **Limitations of the Study**

As discussed in chapter I, any study of this nature has limitations. Therefore, the generalizability of the results must be expressed with certain reservations. Most importantly, only full-time faculty at two private, research-intensive universities in the Northeast participated in this study. It is possible that their responses will not be generalizable to faculty at other types of institutions, such as liberal arts schools, and they might not even be generalizable to part-time faculty at the same institutions. It is also possible that the results will be geographically influenced and not generalizable nationally, since teaching training and an administration's focus on professional development for teaching may differ depending on the area of the country. Only two institutions participated in this study, which hinders overall generalizability, since these schools could be outliers. The institutions are also very similar to one another, meaning that the results of the surveys and interviews might have been similar for precisely this reason.

A major risk was that of sample bias. When faculty received the email invitation to participate, it is highly possible that only those interested in the topic of professional development replied. Of those who replied to and completed the survey, only the faculty who truly wanted to talk more about the topic would have self-selected as interview participants.

Luckily, more participants than expected submitted their names to be chosen for an interview, meaning that the pool from which interviews were selected was larger and therefore more diverse. However, once the interviews were completed, it was apparent that only those faculty who previously taken part in professional development programs were interviewed. Of the eleven interview participants, everyone had previous experience with professional development. That means the study did not receive any interview data from faculty members who refuse to take part in professional development programs, and unfortunately, that could have provided richer data to understand why faculty elect not to participate.

The demographics of those who responded to the survey were compared to the overall demographics of the faculty members at each school in order to ensure that the sample was representative of the population at each institution. Though the comparison indicated that to be the case, it bears repeating that not all faculty at Institution B were sent the survey. Only Arts & Sciences and Engineering faculty were emailed to participate, and this could be a serious limitation to the generalizability of the findings for Institution B. In addition, the IRB at Institution B requested that the survey not be sent out until after graduation, which is a time when faculty often disperse from campus. Though the response rate was almost as high as that of Institution A, it is likely that the timing of survey had an effect on these responses. It also made it more difficult to solicit interview participants; while many faculty offered, by the time they were contacted they had left campus for the summer and declined to participate.

Lastly, the bias of the researcher did not appear to come into play in regard to the collection and statistical tests of the survey data, but it may have been evident in questions that were asked and conclusions that were drawn. Researcher bias also could have had an effect on the interview data. Faculty in the interviews could tell that I valued teaching and believed

professional development was important. It is possible that they were telling me what they thought would be most pleasing to hear. Also, the participants at Institution A knew that I worked at that same institution, so it is also possible that they were holding back from telling me their true attitudes in case it could affect their employment, despite the fact that the informed consent form they signed said otherwise.

### **Implications and Recommendations for Practice**

The findings from this study aid in understanding what types of professional development programming faculty would like to see offered on campus. These facts will be useful for provosts, academic administrators, and teaching center staff in designing programs that will better suit faculty needs. In addition, the data gathered from interviews and the analysis using Bronfenbrenner's (1979; 1993; 1995) ecological systems theory together shed light on the complex ecologies in which faculty members live. Understanding the competing demands for faculty members' time will also help university administrators develop appropriate messaging, reward systems, and incentives that recognize the busy lives of faculty members. It will also help send the message that teaching is something to be prioritized.

### **Recommendations for Professional Development Programming**

In designing programming, administrators, facilitators, and teaching center staff at research intensive universities should keep in mind some clear preferences that faculty members indicated in the survey results. First of all, faculty are most likely to engage in some sort of professional development once a year. Program facilitators should still offer multiple events per semester, but they must be attuned to the fact that faculty members in general do not plan to attend numerous events per year. Low attendance numbers are likely, but instead of being



deterred by small groups, program facilitators should keep track of the number of unique faculty they come into contact with during the course of the academic year. Repeat programs like faculty learning communities will have a deeper impact on a small percentage of the faculty, but facilitators should pay equal attention to attracting a wider audience via unique interactions once a year.

Second, in terms of session format, survey respondents said they would be most interested in training and hands-on tutorials, specifically those dealing with technology. They are also interested in seminars and lectures in order to collaborate with other faculty members across campus, and a slightly smaller percentage indicated that they would like to be part of a cohort-based group or faculty learning community. The survey respondents were much less interested in smaller, one-on-one assessment sessions such as student evaluation consultations, mentoring, or midterm feedback sessions. Professional development facilitators at research intensive universities should pay attention to these preferences when planning sessions; instead of devoting intense resources to one-on-one programs, they should put more emphasis on conducting useful hands-on tutorials and other programs that facilitate collaboration among faculty. In addition, they should be clearer about the format of their programming; administrators should advertise which programs will be collaborative and which use lecture or tutorial formats.

Faculty in this study also indicated preferences regarding how long sessions should run. Most people would be interested in 1-2 hour workshops as opposed to day-long events. Female faculty expressed more interest in ongoing sessions, like learning communities, than did their male counterparts, who would rather attend one-time sessions. Faculty said they think lunchtime is a good time of day to hold sessions, and of course, food is essential. The oft-repeated request

for food suggests that faculty desire a casual and collegial atmosphere where they can break bread with their colleagues.

Third, the survey findings demonstrate faculty preferences in terms of program topics. The most popular topics were new pedagogical practices, using technology, discussion techniques, and e-teaching. As these preferences might vary by institution and by year, professional development administrators should periodically survey their faculty to gauge where their interests lie. For these particular institutions, faculty did not show much interest in programs about grading and giving feedback, using teaching assistants, teaching large classes, or classroom management. Therefore, facilitators should not focus their time on developing programs in these topic areas, and they should instead work to develop new and innovative programs that match the top subject area preferences while fitting into the preferred formats discussed previously.

Following that, faculty respondents also said they would like to see topics designed around specific questions or particular needs that they might have in the classroom. For the most part, they did not want to participate in very general professional development sessions. They also spoke enthusiastically about participating in sessions that involve someone they know. Program facilitators should actively try to partner with specific faculty members for each session that they advertise, as that can help in attracting a larger audience. For example, if a session involves creating exciting PowerPoints, facilitators should find one or two faculty members across campus who excel in this area and ask them to take part in the program. Then the program can be advertised with the faculty members' names attached, thus enticing more of his/her colleagues to attend. It also suggests that faculty hold a sense of trust in their peers, where they look forward to hearing their tips on teaching instead of exclusively listening to

facilitators or external speakers who may not fully understand the classroom environment of the particular institution.

Fourth, it is imperative for those working in the area of faculty development to understand how little teaching training faculty receive while in graduate school. The survey and interviews clearly showed that faculty were not happy with the lack of emphasis placed on teaching development during their doctoral programs. Teaching centers and professional development facilitators should specifically target new faculty who have recently graduated in order to discuss basic teaching methodologies before they enter the classroom. This could be done as part of new faculty orientation; though faculty are often inundated with information during orientation, program facilitators can make their presence known to new faculty and should try to reach out to them during the first few weeks of school.

Fifth, most critiques of professional development sessions were centered upon the facilitators and the way in which the programs were administered. Some faculty felt that too much “edu-jargon” made sessions difficult to understand and not pragmatic enough. Others said that programs sometimes take a “one-size-fits-all” approach to faculty development. Still others complained that program facilitators did not seem to know what they were doing. A number of faculty also stated that they felt like certain events they had attended previously turned into “bitching sessions.” It is important to be aware of all these critiques when creating professional development sessions. Perhaps more scholarly, less pragmatic sessions can be advertised as such, while step-by-step tutorials can proclaim, “in this session, you will learn how to x” (provided they deliver on their promise). Facilitators should also take care to steer programs away from complaint sessions while staying on topic. Trainers should be trained in facilitation of professional development; this may seem obvious, but it bears mention. Faculty can see

through hastily put-together presentations and are quick to question the credentials of presenters. It is crucial that facilitators have training in what faculty want to learn and the best means for delivering it.

Finally, the main reason that faculty do not attend professional development programs is lack of time, specifically for junior faculty members. Once again, program facilitators should use their understanding of faculty ecologies in order to develop sessions that can best reach each subsection of the population. They should create specific programming that targets junior faculty members with issues that relate to them, like developing new courses or balancing teaching and research early in one's career. Designing programming that will be attractive enough to entice faculty to come while at the same time making it worthy of their time should be the main goal of professional development facilitators.

As the findings from this study showed, males and tenured/tenure-track faculty are significantly less likely to attend professional development than females or non-tenure track faculty. Professional development facilitators should work diligently to reach these populations. As with the recommendations above for junior faculty, specific programming can be designed for tenured faculty that addresses concerns unique to that demographic group, such as ways to keep one's teaching fresh after tenure, or technology-based programs for tenured faculty only. It may be more difficult to design programming directed at male faculty, but teaching centers should aim to gather male faculty members' input as much as they can. Some teaching centers have an advisory board of faculty members; it would be extremely important to encourage male faculty to take part in this group and be vocal with their suggestions. Hopefully by working with or surveying male faculty on their campuses, professional development facilitators would be able

to understand what they could do to create programming that might promote the attendance of male faculty members.

### **Recommendations for Administration/Provosts**

Administrations should know that most faculty in this study believe that teaching development is underemphasized at their institutions. For the most part, faculty said that teaching is their main job, and they owe it to their students to be good at it. However, they feel that there is not strong communication from the administration about the value of teaching and its development on campus. This perceived lack of support led some faculty in the study to criticize their administrations for de-valuing teaching and for not effectively communicating the mission of the university to the faculty. Presidents, provosts, and other high-level academic administrators need to talk about the place of teaching on campus. They should reference it in speeches, letters, emails, and daily interactions on campus. When possible, funds should be reserved for supporting teaching across campus via grants, programs, and teaching centers. Institutions should have committees that expressly tackle issues related to teaching and its development on campus. Without these signals, among others, from the top down, faculty will continue to feel unsupported in their teaching. In fact, some faculty in this study even mentioned the fear of being criticized by their colleagues for paying too much attention to teaching. This imbalance is unhealthy for institutions, especially as the students are the ones who stand to suffer.

With regard to professional development, the majority of faculty surveyed said that they found it useful. They think an institution should be involved in promoting it on campus, especially because they see it as a way to build collegiality among the faculty. Their main reason for not attending is typically lack of time, though they suggested that a way to encourage

participation would be through the use of incentives. Many faculty mentioned that stipends, rewards, awards, and course-release time would certainly entice them to be more involved in professional development. Small stipends for attendance, particularly in ongoing programs or for helping to lead sessions, would be easy enough for administrations to offer. In addition, teaching awards (monetary or otherwise) would encourage a culture of valuing teaching, and more faculty might pay attention to their teaching in order to compete for these awards. Though course releases seem counter-intuitive, many faculty mentioned that this would give them time to re-develop courses and try to be innovative in their classrooms. Rewarding their pursuit of innovation and the attention to their craft would indicate to all faculty that this is something they should mimic.

Incentives would be useful in getting faculty to attend professional development, but the larger issue of the value of teaching in promotion and tenure should also be addressed by administrations. Faculty said they constantly receive mixed messages about what the administration values. They want to be evaluated on their teaching, but they sense that it is not discussed much in the promotion and tenure processes. In addition, there are often no clear policies about how teaching is evaluated on campus. As a result, they perceive that teaching is not important to the administration, and there is a sense that they only have to teach at the bare minimum competency in order to maintain their jobs or gain tenure.

Administrators can address this by setting out a clearer reward structure that outlines exactly how and when faculty will be evaluated. Specifically, they should explain how teaching is evaluated, either via peer evaluations, department chair evaluations, or student evaluations. Faculty at these two research institutions also stated that they felt student evaluations held too

much weight; better evaluations were often given to “easier” teachers, so student evaluations were sometimes not representative of a faculty member’s pedagogical aptitude.

In addition, administrations need to value teaching in the promotion and tenure processes. Though most institutions claim an even weight between teaching and research, faculty hear from colleagues that research is more important. Administrations would be better off setting clear expectations for what they will look at in these processes. Whether the division is equal or not, the messaging should be clear and consistent instead of faculty hearing anecdotal messages. By hiding behind poor communication and unclear policies, administrations bury the value of teaching and, intentionally or not, send the message that it is unimportant on campus.

Administrators should also keep in mind that male and tenured/tenure-track are less likely to attend professional development for teaching and are less likely to value teaching development. Department chairs and deans can work on a micro level to send the message to these sub-groups in order to show that teaching is valued on campus.

### **Recommendations for Academia**

Academia as a whole can also take recommendations from the findings of this study. While it is more difficult to enact change across all of higher education, there are three major areas in need of improvement that both institutions and higher education policy should take into consideration.

First, there should be more teaching training for graduate students in doctoral programs, specifically those at research institutions whose ultimate goal it is to become a faculty member. Systematically, this can be enacted by changing policies and practices in graduate education that would encourage attention to teaching development. This can be done via certificate programs while students are engaged in doctoral studies, as many institutions have already started offering

across the country. It can also be effected through mentoring relationships within doctoral programs where students are encouraged to partner with faculty members who are known for excellent teaching. Some institutions even have formal programs where their graduate students are set up with their own classes to teach either at their home institutions or partner institutions nearby. Teaching centers can develop graduate student specific programming, and incentives like free food or transcript notations should be offered. These simple solutions would begin to change the emphasis on teaching development for graduate students; administrations, institutions, policymakers, and researchers can all start the push toward teaching training in graduate programs.

Second, a very simple recommendation would be to change the term “professional development,” as many faculty in this study at research institutions noted that they found it problematic. “Professional development” in education stems from a K-12 model, and higher education faculty may prefer to use a different term such as “continuing education” or “teaching enhancement.” Researchers and policymakers could initiate the change by calling for it in the literature, while institutions could experiment with different names or survey their own faculty to see what would better suit their preferences.

Finally, as mentioned earlier, all of academia needs to do a better job of raising the value of teaching. More discussion of teaching and its development is important, and this should lead to a reevaluation of its place on campus. Specifically, teaching should be weighed as much as research in determining a faculty member’s hiring, tenure, and promotion. Again, researchers and policymakers should begin this discussion by putting the onus on institutions to demonstrate their respect for teaching. Institutions that devalue teaching should be called out in the media, while those that do a good job of supporting teaching and weighing it in hiring and promotion



decisions should be highlighted. Ultimately, higher education's main goal has always been the education of its students; it is imperative for academia to demonstrate its commitment to teaching or it risks losing sight of its top priority. When teaching in traditional higher education fails, students will opt for cheaper alternatives, and the risk exists for the collapse of American higher education as we know it.

### **Recommendations for Future Research**

This study attempted to address a gap in the literature; specifically, it aimed to understand the attitudes and preferences of faculty members across disciplines at two research universities. There are, however, some clear directions for future research. The most notable would be to study faculty at a wider range of research institutions across the country to determine whether the results are similar at other schools. That would make the findings far more generalizable as the sample size would be larger and geography would not be a limiting factor.

Besides expanding the number and geographic locations of research institutions studied, it would also be useful to survey faculty at all schools within each institution. As mentioned previously, a limitation of this study was that specific professional school faculty were excluded from the population surveyed at Institution B. Understanding the preferences of medical, dental, and other professional faculty at all research institutions studied would also make the findings more generalizable.

The research question for this study focused on faculty members at research institutions, namely because it was assumed that faculty at these institutions are receiving the message that research is more important than teaching. Comparing the findings of this study to another study replicated with faculty at a different type of institution could yield fascinating results; are faculty at liberal arts schools receiving similar messages? What are their attitudes toward professional

development for teaching? Alternatively, since the two institutions used in this study were highly productive research universities that are also extremely selective, it could be interesting to compare the findings of this study with institutions that rank lower on the Carnegie classification scale and are less selective.

Additionally, the differences between the subpopulations in this study could be an area of further research. For example, it was shown that women and men are statistically significantly different on many aspects that were measured in this survey. Further follow up with either sex could help explain these different attitudes. The same type of follow up research could be used to understand the differences in populations by tenure status. Perhaps additional interviews that target tenure-track faculty might elicit richer data that would give some suggestions as to what institutions could do to attract them to professional development programs at higher rates. One finding from the qualitative interviews in this study was that professional schools appeared to promote teaching and its development more than Arts & Sciences. A quantitative study to determine whether this is in fact the case would be a good area for future research.

As professional development for faculty members, specifically in the area of teaching, is somewhat new in this country, there are numerous possibilities for future research. Besides studying faculty attitudes and preferences, further studies could attempt to study the effects of this type of programming on faculty members, their classrooms, and their student learning outcomes. Though this is a lofty goal, more empirical evidence demonstrating the utility of professional development might ultimately help convince faculty that such endeavors are worthwhile.

### **Conclusion**

The findings of this study have demonstrated that faculty are aware of professional development and, for the most part, believe it is useful and important. However, there are numerous competing factors in their ecologies that cause professional development and teaching in general to take a back seat to other duties in their lives. They also perceive a lack of value placed on teaching development by the administration; most faculty said they felt they were only evaluated on their research, and their teaching skills need only be minimal in order to keep their jobs. Without serious structural change in academia and at the instructional level in particular, faculty will continue to receive these same messages that prioritize research over teaching. If administrations are unable to effectively communicate a more equal balance between research and teaching, faculty cannot be expected to care about developing their teaching. Presidents, provosts, deans, academic administrators, and faculty development facilitators have the ability to shift the culture of their institutions to put more focus on teaching; these messages will eventually filter from faculty members' exosystems to their microsystems, and cohesion in their mesosystems will create an ecology that is more open to development.

The findings also bring to bear some important, larger questions about teaching in general. Most importantly, can teaching be taught? Some would argue that it is an innate skill that one either has or does not have. These people would never be swayed by the argument that professional development can help enhance one's teaching ability, and they therefore would neither promote it nor participate in it. Secondly, even if there were an agreed upon definition of good or effective teaching, how could it be evaluated? What is possible to measure (test scores, satisfaction scores, etc.) versus what should be measured? Who defines what should be measured? The evaluation of teaching is fraught; even faculty who believe themselves to be

good teachers or those who consistently receive positive evaluations become concerned when external constituencies enter their classrooms. While teaching is very much a public performance, faculty are used to performing for their own students behind closed doors. It is not the same as research, which is polished and put out into the world in order to be critiqued by other scholars. Therefore, even if people agree about what should be evaluated or measured, this evaluation is likely to meet professional resistance from faculty who see teaching as more private than their research.

Lastly, what about the students? As numerous authors have noted (Marsh, 2007; Marsh & Dunkin, 1992; Ory, 2001; Wachtel, 1998, among others) there is an ongoing conversation in higher education critiquing what student evaluations actually measure. Certainly student evaluations should not be the only way by which faculty teaching is judged. However, this means that other faculty members or administrators should be allowed into the classroom to evaluate teaching, but, as noted above, external constituencies in classrooms can cause conflict for the faculty member being watched. Do the students even care about learning outcomes, or do they just care that the class is easy? Some studies (Centra, 2003) show that students do indeed care about what they are learning in the classroom. This makes the case for more attention paid to teaching even stronger. As the cost of higher education increases, students want to ensure that they are coming away from college with the knowledge and skills that they hoped to acquire.

The bigger questions of defining and measuring good teaching, as well as the trustworthiness of student evaluations, all have additional impacts on a faculty member's ecology. Without structural change in higher education, the anti-developmental ecology of the faculty member is destined to endure. Tensions between teaching and research will worsen, and students will lose out. Perhaps more of them will turn to cheaper alternatives online, possibly

leading to decreased enrollments in traditional brick-and-mortar institutions. Faculty recognize that their students are their consumers, yet administrations continue to prize research over teaching when ultimately quality, face-to-face teaching is what the students are looking for. A serious shift in the balance is needed if traditional higher education institutions are going to endure.

## APPENDIX A: Survey Instrument

### Faculty Perceptions of and Attitudes Towards Professional Development Programs on College Campuses

This brief survey is part of a dissertation project conducted by a doctoral candidate at Boston College.

All survey answers will be kept strictly anonymous. The responses will not be correlated to your name or IP address in any way.

There are **18 questions**, and it should take you about **5-6 minutes** to complete. Your help is greatly appreciated!

#### **Demographics:**

Gender:

- male
- female
- other

My age range is:

- under 40 years old
- 40-50 years old
- 51-60 years old
- over 60 years old

My tenure status is:

- non-tenure track
- tenure track
- tenured

My academic discipline is:

- business
- law
- social work
- nursing
- engineering
- social science (expanded based on what each school offers; see list in chapter IV)
- humanities (expanded based on what each school offers; see list in chapter IV)
- science (expanded based on what each school offers; see list in chapter IV)

For purposes of this survey, we use the term “professional development programs” to refer to any type of organized event on campus aimed at enhancing the **teaching** skill set of faculty.

Please note that not all the questions are institution-specific.

1. Are you aware of any professional development programs offered on your campus?  
These can include, but are not limited to: workshops, orientations, technology training, one-on-one support, semester or year-long programs, cohort-based support groups, and video recordings of class sessions for feedback.  
-yes  
-no
2. Have you attended any professional development programs on campus?  
-yes  
-no
3. If yes, briefly describe what type of programs you have attended and why you chose to participate. How useful do you feel these programs were in improving your teaching?  
(open response)
4. If no, please describe why you have not elected to take part in these programs.  
-I do not have enough time  
-I am not interested  
-my department doesn't value teaching development  
-I did not know they existed  
-other: (please explain)
5. If programs were more widely available and advertised extensively, how likely would you be to attend?  
1 = very unlikely  
2 = unlikely  
3 = undecided  
4 = somewhat likely  
5 = likely  
6 = very likely
6. How often would you plan to engage in some form of professional development if programs that suited your interests were offered on campus?  
-once a month  
-once a semester  
-once a year  
-never  
  
6a. If you answered "never," please briefly explain the main reason you would not participate.

7. What types of programs would you find most engaging? (select all that apply)
- lectures/seminars
  - hands-on tutorials
  - one-on-one teaching assessment and feedback
  - technology training
  - learning communities (where groups meet based on shared interests in particular topics related to teaching)
  - cohort-based groups (for example, a group of junior faculty meets once a month for a whole semester)
  - mentoring
  - student evaluation consultation
  - collaboration with other faculty members
8. What topics of programs would be most useful to your teaching? (select all that apply)
- course design (objectives, grading rubrics, etc.)
  - classroom management
  - using technology in the classroom (Powerpoint, clickers, lecture capture, etc.)
  - e-teaching (Blackboard and other media that can be accessed outside the classroom)
  - flipped classroom
  - college student cognitive development (including varied learning styles)
  - new and innovative pedagogical practices
  - lecturing skills and techniques
  - discussion skills and techniques
  - integrating different teaching techniques
  - grading and giving feedback on student work
  - best use of teaching assistants/graders
  - e-portfolios
  - how to handle large classes
  - addressing diverse (race, gender, sexual orientation, economic background, academic preparation, etc.) classroom populations
  - dealing with cheating, plagiarism, and other difficult situations
  - reflective teaching
9. In general, how much importance do you think should be placed on professional development programs for teaching?
- 1= great importance
  - 2 = some importance
  - 3 = neutral
  - 4 = little importance
  - 5 = very little importance



10. How useful do you believe professional development activities on campus would be for your teaching?
- very useful
  - useful
  - neutral
  - useless
  - very useless
11. How confident do you feel in your teaching?  
(Sliding scale: 0 = not at all confident, 100 = extremely confident)
12. How much teaching training (mentors, workshops, discussions, etc.) did you receive during your time in graduate school?  
(0 = none at all, 100 = significant teaching training)
13. How would you rate the importance placed on teaching development at Institution A/Institution B?
- underemphasized
  - the right amount
  - overemphasized
14. How involved do you think an institution should be in promoting professional development for faculty teaching on campus?
- extremely involved
  - somewhat involved
  - neutral
  - not involved
- 14a. Please explain your thoughts.
15. Do you have any additional thoughts on faculty professional development for teaching?
16. Would you be willing to participate in a 60-minute follow-up interview to provide more context for the aggregate survey results? If so, please click [here](#), and a new Qualtrics screen will open for you to leave your email address so that it is not associated with your survey responses. Those who are interviewed will receive a \$20 Amazon or Starbucks (your choice) gift card.

Thank you very much for your participation in this survey. Your help is greatly appreciated!

If you have any other advice, comments, or suggestions regarding this topic, please email [pescej@bc.edu](mailto:pescej@bc.edu). Thanks!

**APPENDIX B: Interview Protocol****Faculty Perceptions of and Attitudes toward  
Professional Development for Teaching**

Confidentiality Statement: Signing of Informed Consent document

Introduction: I am interested in hearing your thoughts about professional development on your campus. I'm specifically asking about professional development initiatives aimed at teaching enhancement. These can be based in your department or anywhere else on campus.

**To begin, I'd like a little general information.**

What is your discipline?

Tenure Status/Title?

Years Taught?

Did you work at any other institutions previously?

I am first going to ask you some questions about your past experiences with professional development activities.

1. Would you please tell me about any professional development activities on your campus? (Prompts: What have you seen advertised/offered? Approximately how often do you think they are offered? As far as you know, who is responsible for these activities on your campus?)
- 2A. If you have gone to any of these activities, would you please describe them to me?
  - 2i. If you have gone, how often have you gone?
  - 2ii. What prompted you to go?
  - 2iii. Do you feel that the time you spent at these activities was rewarding?
  - 2iv. Do you feel that the time you spent at these activities was rewarded? (Prompts: Did the administration recognize this? Did you get credit from your department? Was this counted towards your tenure/promotion process?)
- 2B. If you haven't attended any of these activities, could you briefly tell me why? (Prompts: Is there something specific that has deterred you?)
3. What format of professional development activities (of those you have attended/seen advertised) attract or interest you? (Prompts: Hands-on activities, lectures, workshops, discussions, etc.)

- a. What format is most useful for you?
4. What subject matter (of those you have attended/seen advertised) interests you most? (Prompts: teaching with technology, student development, meeting diverse needs in the classroom, new pedagogical techniques, etc.)
5. Did you experience any professional development for teaching (or teaching training) during your time in graduate school? (If yes, please describe it for me. Did you find it useful when you began your faculty position?)

**Next, I am going to ask you some specific questions about your campus.**

6. How are professional development activities communicated to you as a faculty member?
7. How would the means of communication affect your likelihood of participating? (Prompts: Does it matter if the notification comes from your department chair, the department admin, the Provost's Office, etc.?)
8. Are any professional development activities ever required by your department or by the administration?
9. How would required versus not required affect your perception of professional development?
10. How important do you perceive professional development to be to your department?
  - 9i. To your administration?

**Now I am going to ask you a little more about your thoughts and preferences concerning professional development.**

11. How important, if at all, do you perceive professional development is for faculty members?
12. How, if at all, do you believe professional development could help your teaching?
  - 11i. Your students?
13. What subject areas of professional development would you want to see offered on your campus?
14. How would you want to be notified about professional development activities?
15. What could your department do to encourage you to go/demonstrate to you that they value teaching development?
  - 15i. What could your administration do?

16. In what ways you think higher education in general could encourage faculty to attend professional development activities?
17. To conclude, do you have any other thoughts on this subject? Is there anything we have not already touched upon?

**Thank you very much for agreeing to be interviewed!**

**APPENDIX C: Informed Consent Form****Participant Informed Consent Form**

Boston College: Lynch School of Education

Title of Study: Faculty Perceptions of and Attitudes towards Professional Development for Teaching

Researcher: Jessica Pesce

Type of Consent: Adult Consent Form

**Introduction**

- You are being asked to participate in a research study conducted by a Boston College doctoral student as part of a dissertation project. The findings may appear in future publications, and they may help inform professional development programming on your campus.
- Please read this form and ask any questions you may have before agreeing to participate.

**Purpose of the Study:**

- This study aims to understand faculty members' perceptions of professional development programs for teaching in higher education.
- You were selected as a possible participant because of your status as a full-time faculty member at one of two institutions in the Northeast area.

**Description of Study and Time Commitment:**

- If you agree to be in this study, you will participate in a semi-structured interview that should take no more than one hour (60 minutes).

**Risks/Discomforts of Being in the Study:**

- The study has the following risk: the survey may pose a question that you find embarrassing or which, for whatever reason, you would prefer not to discuss. If this occurs, you need not answer the question.
- Other than the matter of potentially provocative questions, there are no reasonable foreseeable risks. Your responses will be kept confidential and pseudonyms will be used. Your responses cannot affect your job security in any way.

**Benefits of Being in the Study:**

- You will probably not get any direct benefit from participating in this study. You may appreciate having an opportunity to express your opinion about this topic.

**Payments:**

- You will receive a \$20 gift card to Amazon or Starbucks (your choice) for your participation.

**Costs:**

- There is no cost to you to participate in this research study.

**Confidentiality:**

- The responses to this study will be completely anonymous. The interviewer's notes and voice recordings (should you chose to allow the interview to be recorded) will be destroyed after the project is complete.

**Voluntary Participation/Withdrawal:**

- You need not answer every question that is posed, for whatever reasons.
- You are free to withdraw your participation at any time, for any reason.
- Neither your participation nor withdrawal will affect your current or future relations with the University.

**Contacts and Questions:**

- The researcher conducting this study is Jessica Pesce, a doctoral candidate in the Lynch School of Education at Boston College. If you have any questions, you may contact her at [pescej@bc.edu](mailto:pescej@bc.edu) or 617-552-6848.
- If you have any questions about your rights as a person in this research study, you may contact: Director, Office for Research Protections, Boston College at (617) 552-4778 or [irb@bc.edu](mailto:irb@bc.edu).

**Statement of Consent:**

I have read the contents of this consent form, and I give my consent to participate in this study. I have been encouraged to ask questions, and I know that my participation is entirely voluntary. I have received a copy of this form.

**Signatures**

---

**Date**

---

**Consent Signature of Participant**

---

**Print Name of Participant****Participant (please check one):**

\_\_\_\_\_ **I consent to this interview being recorded.**

\_\_\_\_\_ **I do not consent to this interview being recorded.**

**APPENDIX D: Solicitation Email**

Note: This email was sent out through the Qualtrics email system.

Dear XXX Faculty,

I am a Ph.D. candidate in the School of Education, and my dissertation research is on faculty perceptions of and attitudes toward teaching support and professional development on campus. **As part of the study, I am sending out a survey to only full-time faculty in XXX Schools.**

I also work at XXX, and the results of this survey will help inform the development of the new Center for Teaching Excellence on our campus.

I would sincerely appreciate your help in answering this survey. There are 18 questions, and it should take you only about 5-7 minutes to complete.

All information will be kept strictly anonymous. Your responses will not be associated with your email address nor your IP address.

Thank you very much in advance,

Jessica Pesce

**Follow this link to the Survey:**

`${1://SurveyLink?d=Take the Survey}`

**APPENDIX E: Survey Findings****Closed-ended Questions**

Question 1: Are you aware of any professional development programs offered on your campus?

Answer	Frequency	Percent
Yes	418	96.8%
No	14	3.2%

Table D1. Awareness frequencies.

Question 2: Have you attended any professional development programs on campus?

Answer	Frequency	Percent
Yes	320	73.9
No	112	26.1

Table D2. Attendance frequencies.

Question 5: If programs were more widely available and advertised extensively, how likely would you be to attend?

Answer	Frequency	Percent
1-Very Unlikely	37	8.5%
2-Unlikely	67	15.5%
3-Undecided	62	14.4%
4-Somewhat Likely	117	27.1%
5-Likely	94	21.8%
6-Very Likely	36	8.3%
Missing response	19	4.4%

Mean	3.66
Median	4.00
Standard Deviation	1.44

Table D3. Likelihood descriptives.

Question 6: How often would you plan to engage in some form of professional development if programs that suited your interests were offered on campus?

Answer	Frequency	Percent
--------	-----------	---------



1-Never	34	7.9
2-Once a year	180	41.6
3-Once a Semester	165	38.1
4-Once a Month	30	6.9
Missing response	23	5.4

Mean	2.47
Median	2.00
Standard Deviation	.75

Table D4. Frequency of participation descriptives.

Question 7: What types of programs would you find most engaging? (choose all that apply)

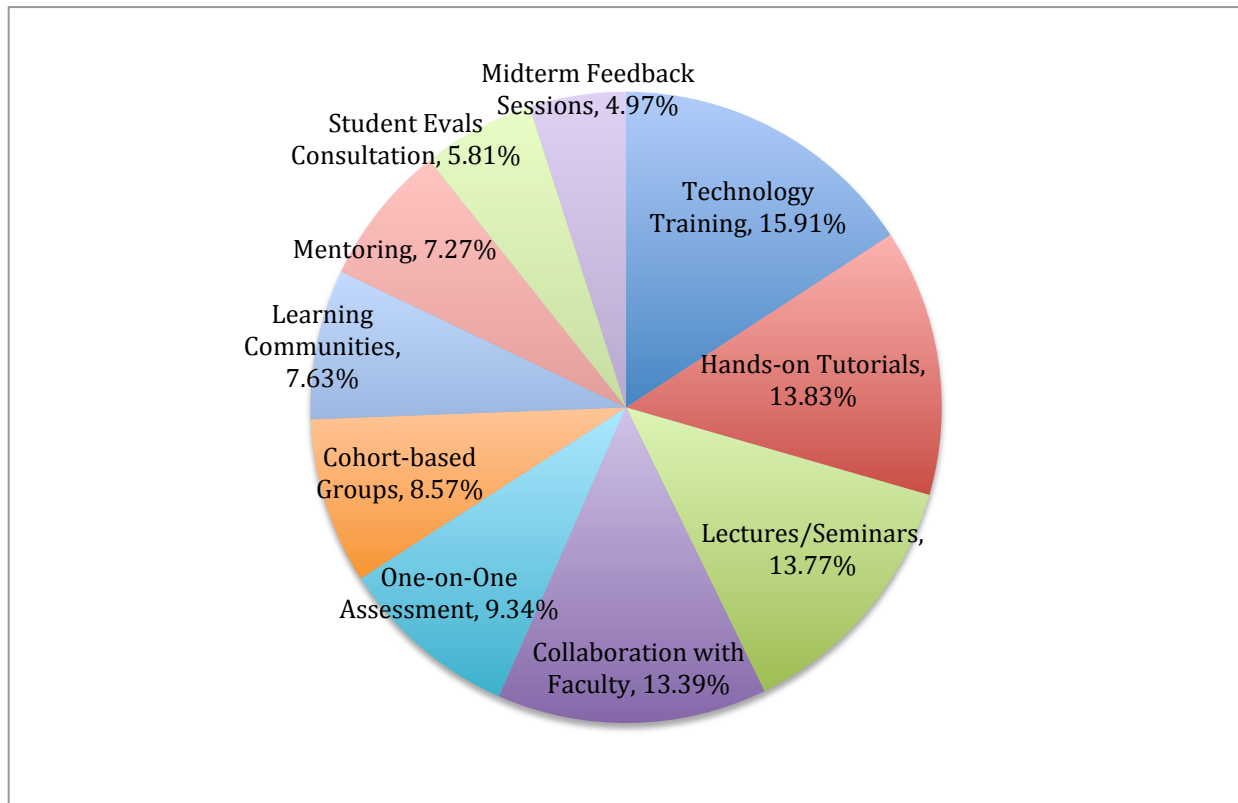


Figure D1. Pie chart. Format of program preferences.

Question 8: What topics of programs would be most useful to your teaching? (choose all that apply)

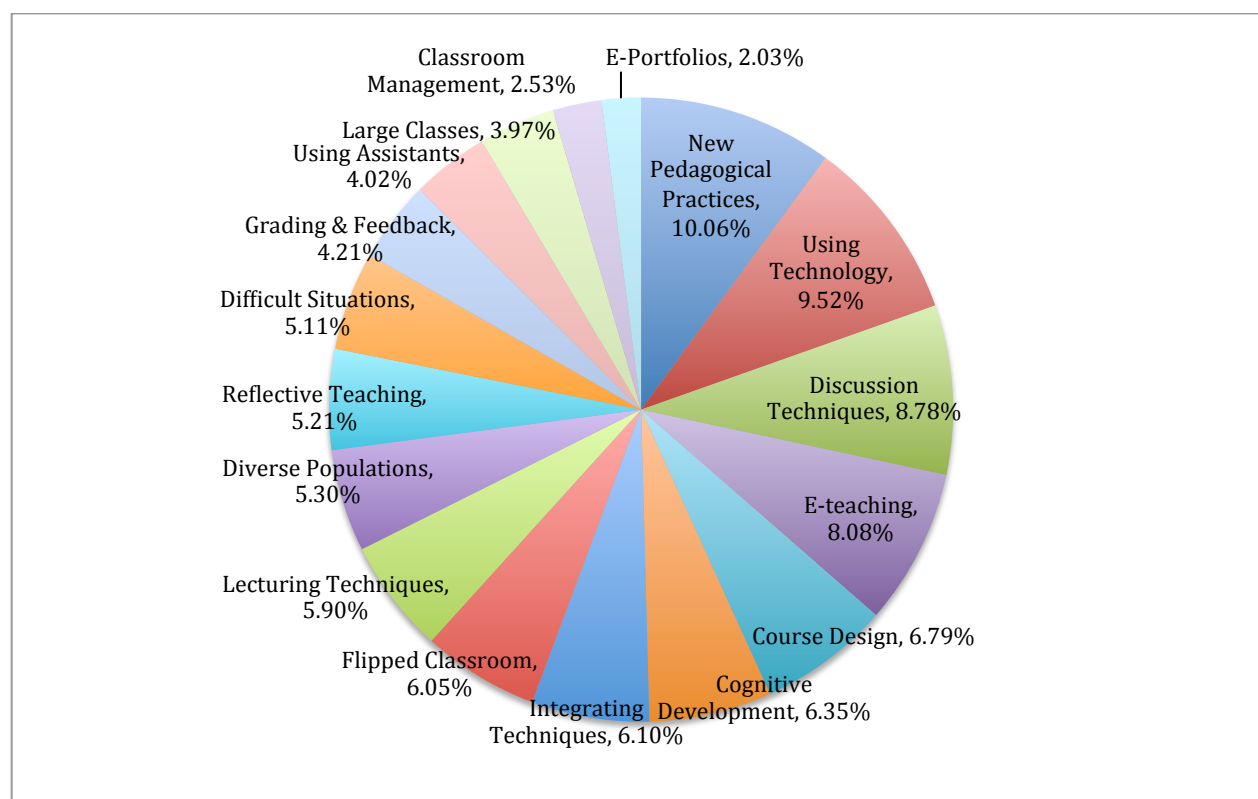


Figure D2. Pie chart. Topic of program preferences.

Question 9: In general, how much importance do you think should be placed on professional development programs for teaching?

Answer	Frequency	Percent
1-Great Importance	171	39.5
2-Some Importance	186	43.0
3-Neutral	33	7.6
4-Little Importance	10	2.3
5-Very Little Importance	6	1.4
Missing response	26	6.1

Mean	1.75
Median	2.00
Standard Deviation	.82

Table D5. Importance-general descriptives.

Question 10: How useful do you believe professional development activities on campus would be for your teaching?

Answer	Frequency	Percent
1-Very Useful	77	17.8
2-Useful	217	50.1
3-Neutral	86	19.9
4-Useless	16	3.7
5-Very Useless	9	2.1
Missing response	27	6.5

Mean	2.17
Median	2.00
Standard Deviation	.86

Table D6. Usefulness descriptives.

Question 11: How confident do you feel in your teaching?

Confidence	
Range	0-100
Mean	82.04
Median	85.00
Standard Deviation	12.77
# Valid Responses	351
# Missing	81

Note. 100 = “extremely confident”  
Table D7. Confidence descriptives.

Question 12: How much teaching training (mentors, workshops, discussions, etc.) did you receive during your time in graduate school?

Teaching Training	
Range	0-100
Mean	29.38
Median	19.00
Standard Deviation	31.53
# Valid Responses	347
# Missing	85

Note. 100 = “significant teaching training”  
Table D8. Teaching training descriptives.

Question 13: How would you rate the importance placed on teaching development at your institution?

Answer	Frequency	Percent
1-Underemphasized	175	40.4
2-Right amount of emphasis	200	46.2
3-Overemphasized	23	5.3
Missing response	34	8.1

Mean	1.62
Median	2.00
Standard Deviation	.59

Table D9. Importance at institution descriptives.

Question 14: How involved do you think an institution should be in promoting professional development for faculty teaching on campus?

Answer	Frequency	Percent
1-Extremely Involved	179	41.3
2-Somewhat Involved	195	45.0
3-Neutral	24	5.5
4-Not Involved	3	.7
Missing response	31	7.4

Mean	1.63
Median	2.00
Standard Deviation	.63

Table D10. Involvement descriptives.

### Open-ended Questions with Themes

Question 3: If you have attended any professional development programs, briefly describe what types of programs you have attended and why you chose to participate. How useful do you feel these programs were in improving your teaching?

N=389

Major types of programs attended (in order of frequency):	Examples:
Technology training/workshops (technology and e-teaching days on each campus, specific Powerpoint workshops, how to use course management systems, clickers, iPads, etc.)	<ul style="list-style-type: none"> <li>• Technology Day -- interesting to stimulate thought about using more technology in my teaching.</li> <li>• Technology training but it turns out that I have not used it much because the technology seems to be changing constantly.</li> <li>• I often attend PD linked to the use of technology since it is becoming so prominent in our overall profession. That said, I often find that it's not especially relevant to my work.</li> <li>• I have attended workshops on the use of technology in the classroom. I have adopted and used effectively some of the advancements I learned about in these workshops in my course.</li> </ul>
Workshops (usually with lunch): grading, handling different groups of students, adjunct training, course design/redesign, Writing Across the Curriculum	<p>Overall theme: useful, though they often contain information that participants already knew.</p> <ul style="list-style-type: none"> <li>• I attended a workshop whose aim was to help faculty redesign and improve a course. This was very useful as I was able to figure out new ways to teach a course I had been teaching for a long time, mostly because the other participants were from different disciplines, and that gave me a broader view of my course.</li> </ul>
Microteaching/evaluations/video evaluations	Overall theme: one-on-one consultations are helpful for teaching feedback.
Lectures on various topics (academic misconduct, rubrics, interpreting evaluations, etc.), including programs with specialists from other universities	Overall theme: these are very common, but often contain information participants already knew.
School specific programs	<p>Overall theme: these are especially common in Nursing and Business.</p> <ul style="list-style-type: none"> <li>• Some within my school whereby colleagues share teaching methods. These are helpful and build collegiality.</li> </ul>
Training at conferences and other institutions (not on campus)	<ul style="list-style-type: none"> <li>• I attend non-university workshops that add to my own information about my field. These enhance my creative work and my teaching. I attend occasional meetings on-campus about teaching.</li> </ul>

Table D11. Themes regarding types of programs attended.

Themes regarding utility:	
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Programs build collegiality.	<ul style="list-style-type: none"> <li>• Provided opportunities to meet and learn from colleagues across campus.</li> <li>• Builds a sense of team with my colleagues, hearing about their experiences is so helpful.</li> <li>• Nothing palpable came from these workshops. Interacting with faculty in other disciplines became the point</li> </ul>
Programming is very useful.	<ul style="list-style-type: none"> <li>• I have found everything I have been able to attend very helpful, including both small but very useful tips, to bigger ideas.</li> <li>• Provided new perspectives on student experiences and learning.</li> <li>• I find that they provided some thought-provoking ideas, some of which I try to incorporate into my own teaching</li> <li>• I have attended both in-house and national programs on teaching on several occasions. I have also read articles on teaching. I have learned something from every program I have attended.</li> <li>• I wanted to meet colleagues in other fields and think and learn about larger issues in teaching and pedagogy, such as serving diverse student populations, and try to find ways to work on that in my own teaching. All of these have been very useful in shaping my teaching.</li> </ul>
Programming is not as useful as I hoped.	<ul style="list-style-type: none"> <li>• It certainly helped me think more about teaching writing and gave me ideas for tackling certain problems/concepts, but maybe nothing more than I would have gotten out of talking to more experienced colleagues.</li> <li>• The teaching programs which I have attended have not been particularly helpful. For instance, I have received few realistic strategies for teaching a large class.</li> <li>• Chose to participate because I thought they would be of use. Sometime they are, and sometimes they are not.</li> <li>• Useful, but not always immediately applicable.</li> <li>• Sitting around and talking about it was absolutely useless.</li> </ul>
Usefulness depends on ease of participation.	<ul style="list-style-type: none"> <li>• Encouraged to attend by senior colleague in the department. Department paid for travel costs and registration fee.</li> </ul>

Table D12. Themes regarding utility of programs.

Question 4: If you have not attended any professional development programs, please describe why you have elected not to take part in these programs.

N=90

Main themes (in order of frequency):	Samples:
Not enough time.	<ul style="list-style-type: none"> <li>• I have information overload. I have enough to keep track of staying abreast of my academic field, the demands of teaching, and the demands of the University regarding what seems like the endless tasks of administration of my program and department, that I can't spend my time on projects dreamed up by others to pad their own résumés. I apologize for my cynicism but over the past two decades this university has become an increasingly impossible place to work. There is no longer any time to pursue research and teaching, two domains that used to be valued here. If others have found it manageable, my hat is off to them.</li> <li>• Because I've been swamped with a bajillion other things (just finished my first year).</li> <li>• I'm very busy with research. I don't know too much about the teaching workshops. I haven't heard colleagues praise them or even talk about using them.</li> <li>• Lack of time and lack of financial remuneration.</li> <li>• Lack of time, inconvenient timing of programs with so much else to do.</li> <li>• Too many other duties (aside from teaching, research, writing grants, papers, working with students, etc.)</li> <li>• Not enough time!</li> </ul>
I do not need to/I know what I am doing.	<ul style="list-style-type: none"> <li>• You can't teach an old horse new tricks.</li> <li>• Based on the reviews of colleagues and students, I believe my teaching is very good to excellent.</li> <li>• Don't feel I need to.</li> <li>• Haven't felt the need.</li> <li>• I am an experienced teacher - if I felt I was not engaging students or they were not learning I seek new ways of engaging them.</li> <li>• I know more about teaching in my fields after 40 years working in 5 countries and a multitude of departments and disciplines than I need for present and future purposes.</li> <li>• I think that I already do an adequate job of teaching. I</li> </ul>

	<p>also have no reason to.</p> <ul style="list-style-type: none"> <li>• I'm considered a very good teacher. I see no need to attend these programs.</li> <li>• Confident that my teaching is "good enough" already. I don't like seminars and meetings.</li> <li>• With 30+ years of teaching experience, I figure I know what I am doing.</li> </ul>
Do not find them useful/relevant/interesting.	<ul style="list-style-type: none"> <li>• Skepticism about their usefulness (and about the expertise of "teaching" professionals).</li> <li>• I don't believe they are effective.</li> <li>• As a professional teacher I watch for only courses that are an advanced level.</li> <li>• Didn't seem relevant to my teaching.</li> <li>• Not relevant to teaching graduate students.</li> <li>• I don't feel I need them and they are not relevant to my subject or teaching style.</li> <li>• I find the description of them uninteresting or unrelated to my discipline.</li> <li>• Programs do not seem geared towards the humanities.</li> <li>• I don't feel that the programs are aimed at helping teach a scientific curriculum.</li> <li>• Additionally, the demands on a professor in the sciences are very different from those on one in the arts. It is difficult for sessions to be widely applicable.</li> <li>• Not interested and appeared a waste of my time.</li> </ul>
Unaware/unmotivated to attend.	<ul style="list-style-type: none"> <li>• Hadn't occurred to me to do so.</li> <li>• I am not aware of any of them.</li> <li>• Lack of motivation.</li> <li>• Lack of reward - I would be doing it only for myself.</li> </ul>
Scheduling issues and conflicts.	<ul style="list-style-type: none"> <li>• They are not offered at times that work for my schedule.</li> <li>• They have never fit in with my schedule.</li> <li>• Time conflicts. Many nursing faculty are required to make visits to clinical sites that often conflict with any activities physically on campus.</li> </ul>

Table D13. Themes regarding why people chose not to participate.

Question 6a: If you said you would 'never' plan to participate in some form of professional development program on campus, please briefly explain the main reason you would not participate.

N=33



Main themes (in order of frequency):	Samples:
Not useful to me.	<ul style="list-style-type: none"> <li>• Again, time constraints and dubiousness about effectiveness.</li> <li>• From my past experiences, there is usually little to gain by doing so.</li> <li>• I have no evidence that attendance would improve my teaching.</li> <li>• I have not found these to be helpful. They cover basic topics - nothing that would dramatically enhance my teaching.</li> </ul>
I do not need it.	<ul style="list-style-type: none"> <li>• At this point in my career, I have the conceit that there is not much more that I need to know. One exception might be in the areas involving computers and other "electronic" means.</li> <li>• My teaching has developed pragmatically from my period as a graduate student, and by the age of 72 I have more experience in the classroom than anyone who could teach me. Instruction in current technology is useful, but that is peripheral to real teaching.</li> <li>• I am an excellent teacher already.</li> <li>• I get strong teaching evaluations so teaching development is low on my list of priorities.</li> </ul>
More effective means exist for me.	<ul style="list-style-type: none"> <li>• I find that talking to colleagues about specific issues, asking students more questions, paying attention to mistakes in students' answers in class, homework and exams is a much better way of improving my teaching.</li> <li>• Generally I find it most useful to observe a great teacher, but I have never found workshops useful.</li> <li>• I think one becomes a better teacher by just teaching more, and getting feedback from your students. In my experience, it's not really effective to attend events where people sit around and talk about what works and what doesn't, what's "correct" and what isn't. You only become better by just doing.</li> <li>• I'm not sure that they would be so helpful at my stage of career. I would find it more helpful to have professional development in other areas (e.g. lab management, management of individuals in my lab, etc.).</li> </ul>
Not enough time.	<ul style="list-style-type: none"> <li>• No time, sadly.</li> <li>• Too much time for too little benefit. Events are boring, and make you feel guilty.</li> </ul>

Table D14. Themes regarding why people would never participate.

Question 13a. Please explain your thoughts regarding how involved you feel an institution should be in promoting professional development on campus.

N=327

Main themes (in order of frequency):	Examples:
<p>We owe it to the students to teach well/it is part of our job. It should be highly valued on campus.</p>	<ul style="list-style-type: none"> <li>• Although this institution prides itself for its research, its main business is educating students. Students deserve teachers who are well prepared to utilize a variety of techniques to engage their intellect and imaginations and passions. Good teaching is learned; just because a person knows a lot does not mean that he/she can teach it effectively.</li> <li>• Teaching - and the development of teaching - should be the institution's highest priority.</li> <li>• Teaching and education are the purpose of a university. Of course the university should promote it -- that's the product the university offers, isn't it?</li> <li>• Students are our consumers. If we don't do an excellent job in the classroom, we are cheating them out of a quality education.</li> <li>• Students pay the bills; they deserve to be taught as well as possible; professors can always improve their teaching; they need external help to improve.</li> <li>• Since a significant portion of the institution's income comes from undergraduate tuition, it would do well to value (and I mean monetarily as well) good teaching.</li> <li>• This institution owes a duty to its students to provide good teachers, not simply content-knowledgeable teachers.</li> <li>• I believe this institution has an obligation to offer high-quality, effective instruction. Offering professional development to faculty helps to reinforce the idea that this school expects faculty to provide high-quality, effective instruction.</li> <li>• I think the undergrads are being served less well than they should be.</li> <li>• I think teaching is one of our major missions and that more emphasis should be placed on improving faculty teaching skills especially in light of the fact that many faculty come to academia with little or no professional teaching experience.</li> </ul>

	<ul style="list-style-type: none"> <li>• If an institution cares about its students, it should care about teaching!</li> <li>• Teaching is the heart of the academic experience.</li> </ul>
Strong communication about the value of teaching and its development should come from the university.	<ul style="list-style-type: none"> <li>• Extreme involvement need not mean aggressive marketing or pressure to participate, but strong communication about the value and about the opportunities offered.</li> <li>• I think that if faculty believed that the institution valued teaching, supported teaching, and most importantly, rewarded teaching, then we'd be happy to put more energy into teaching.</li> <li>• It should be made clear that the quality of teaching is valued highly.</li> <li>• Research in educational psychology should be packaged and promulgated to faculty. The science of how people learn should be integrated into teaching workshops, curriculum design, classroom management, etc.</li> <li>• Administration should communicate the centrality of teaching in the academy.</li> <li>• I believe an employer should provide staff development opportunities, especially new teaching pedagogy.</li> </ul>
Institution's involvement should not be heavy handed.	<ul style="list-style-type: none"> <li>• Requiring involvement would be too involved.</li> <li>• I remain skeptical about top-down goody-goody requirements for "development" imposed by the administration.</li> <li>• Facilities should be available, but in no way required or expected.</li> <li>• Though I would want to restrict unsolicited administrative access to the classroom, I do believe that most universities do too little to help their faculty develop effective teaching practices. The result is a lot of courses with less-than-effective teaching.</li> <li>• I think it should be an option, but not required.</li> <li>• I think the university should make opportunities for professional development for faculty teaching available, but then step back. If the university is over involved, it may make these opportunities seem required, which would lead to faculty doing them for the wrong reasons.</li> <li>• I would not want to feel harassed by efforts to promote professional development. Communicating the opportunities clearly and well in advance is sufficient promotion.</li> </ul>
Incentives from the administration would be useful; we are not judged on our teaching,	<ul style="list-style-type: none"> <li>• I think a lot of the promotion of teaching development is somewhat misguided--yes, it's important, and yes, it should happen, but it should be approached with an</li> </ul>

<p>but should be; administration should care less about student evaluations.</p>	<p>awareness that a) faculty don't have a lot of time, and b) they'd like to be better teachers but in the end it's not how they're judged against their peers. Offering monetary incentives for participation in PD is nice, but offering time off from teaching (perversely) would be a better incentive.</p> <ul style="list-style-type: none"> <li>• To really promote it, the administration should link it to rewards. The truth is, however, they SAY they like it but -- in my university location however -- only reward publications. Teaching evaluations don't even matter much (unless they want to get rid of someone; then they are suddenly important). We've been told quite explicitly that merit pay is ONLY for publications. So much for the mission of teaching at this institution. I still try to learn about teaching, use technology, etc. It takes a lot of time, but the administration simply does not care.</li> <li>• The primary mode of teaching assessment at this institution is student evaluations, and that is very problematic as well as lazy.</li> <li>• Placing less weight on student evaluations, which tend to reward easier classes and exams, would be useful.</li> <li>• Teaching is a MAJOR facet of what we do. It should be more heavily weighted when the times come for promotion and tenure.</li> <li>• We say we are concerned with teaching but the emphasis and "rewards" seem directed to scholarship.</li> <li>• I think improving one's teaching could be more incentivized.</li> <li>• Provide incentives for expert faculty to help colleagues (a peer-to-peer structure rather than top-down initiatives).</li> <li>• Good teaching should be encouraged and rewarded, though it often isn't at research universities.</li> <li>• Should make it available, also should offer funding for off-campus programs; should not require.</li> <li>• The university should incentivize pedagogical development. Also there should be more support (i.e. funds and staff support) for new initiatives faculty are willing to undertake in the classroom.</li> </ul>
<p>Teaching development is community-building and benefits everyone.</p>	<ul style="list-style-type: none"> <li>• Creating opportunities for teachers at all levels promotes a sense of shared commitment to students and professional development among colleagues.</li> <li>• Critical, but most effective work would be openness of teacher to being reflective and faculty climate to support quality teaching.</li> <li>• Everyone, not just lecturers, should attend professional</li> </ul>

	<p>development workshops to improve teaching. Some older tenured professors have much to learn regarding teaching...</p> <ul style="list-style-type: none"> <li>• Even the best teachers are in need of constant reminders and thought-provoking activities to keep their teaching alive. Also, the classroom changes so rapidly with all the new gadgets that it is hard to stay on top of things next to all the other duties.</li> </ul>
We need more teaching training for graduate students in academia.	<ul style="list-style-type: none"> <li>• Graduate training at Ph.D.-granting institutions is weak.</li> <li>• Some professors leave graduate school without any teaching experience or teacher training. Senior faculty should be more involved as teaching mentors.</li> <li>• If a university expects high-quality teaching, then it needs to train its staff in teaching, since faculty are rarely trained to teach in grad school. It's as simple as that.</li> <li>• Many professors finish doctoral programs with little pedagogical formation so they need to be brought up to speed.</li> <li>• Too few R1 doctoral programs (where our faculty come from) have a strong teaching emphasis. It's only fitting that our faculty receive the support they need (and may not have had previously) to become good teachers.</li> <li>• Many new hires come with ZERO teaching practice. They are then plopped into classrooms, where students expect great teachers.</li> <li>• It is a joke: most people begin teaching college with no practice, no observation -- it is assumed that they will "get it."</li> </ul>

Table D15. Themes regarding institutional involvement.

Question 14: Do you have any additional thoughts on faculty professional development for teaching?

N=128

Main themes:	Examples:
Not enough time to attend programs.	<ul style="list-style-type: none"> <li>• A lofty goal, but one that might not fit the realities of today's busy lifestyles.</li> <li>• We need dedicated time for this; instead of faculty meetings, for example. The demands for research and</li> </ul>

	<p>service in addition to teaching make it extremely difficult to clear the time to participate in these activities.</p> <ul style="list-style-type: none"> <li>• It's just the time factor! SO many demands on my time, as a scholar, teacher, department member, mentor, committee member, member of my profession, editor, colleague--not to mention mother/daughter/friend/wife. Just not enough hours in the day!</li> </ul>
Reward structure is unclear/does not emphasize teaching and its development.	<ul style="list-style-type: none"> <li>• Faculty are not encouraged or rewarded for trying to change or improve the way they teach. If I want to do a new class or do an old class differently, we get no time to do this work along with our other work. We are better off writing another paper instead of improving our teaching.</li> <li>• Find more ways to recognize and reward good teaching!</li> <li>• We need to become clear about what level of importance teaching has in tenure evaluation. That is not clear at this institution. If it really is what it claims to be, a place where student FORMATION is as important as student achievement, then teaching workshops, differentiated by disciplines, should be mandatory for the first two years of employment here. And when we hire the "big guns" away from other schools, we should insist on seeing their teaching evaluations.</li> <li>• Teaching should be valued more transparently in the tenure promotion process - aside from mere lip service to "excellence" in teaching.</li> <li>• We get mixed messages about the importance of teaching. The balance of our work is supposed to be 40% research, 40% teaching, 20% service. But in our yearly evaluations, it seems clear that teaching counts for little. I think many faculty would pay more attention to teaching, and take professional development more seriously, if the administration made it clearer that it valued teaching and that faculty will see some payoff from the investment in time if they do professional development activities.</li> </ul>
Concern over who is in charge of faculty development.	<ul style="list-style-type: none"> <li>• Focus on teaching and the improvement of teaching in various ways possible makes great sense—the danger lies in who would be staffing this charge and what guiding principles, free of edu-jargon, would drive the enterprise.</li> </ul>
There should be a departmental onus for teaching development and mentoring.	<ul style="list-style-type: none"> <li>• I think that faculty meetings should be at least partially devoted to questions and concerns about teaching--lecturing, grading, etc. Maybe chairs must be encouraged or incentivized to designate faculty meetings</li> </ul>

	for this purpose? <ul style="list-style-type: none"> <li>I think that mentoring of junior faculty is key.</li> </ul>
One-size-fits-all approach to faculty development is concerning.	<ul style="list-style-type: none"> <li>I think the issues are different for experienced teachers than for new faculty. Don't try to come up with a "one size fits all" strategy, since that is boring for everyone involved.</li> <li>I have seen how a one-size-fits-all approach to teaching (lectures=seminars=language teaching) fails, and most often fails language teachers who face a considerable workload in grading and work outside the classroom.</li> </ul>
Support for teaching varies by school and department.	<ul style="list-style-type: none"> <li>The amount of support varies dramatically between different departments and schools on campus. Some schools are VERY supportive and give lots of help. Others downplay the importance of teaching in favor of research.</li> </ul>

Table D16. Further thoughts on the topic.

### Chi-Square Results by Question

Independent Variable *Awareness (Question #1)	p-value	Result
Gender	.135	Not Significant
Age	.276	Not Significant
Tenure Status	.081	Not Significant
Discipline	.096	Not Significant
Institution	.394	Not Significant

Table D17. Chi-square. Awareness by demographics.

Independent Variable *Attendance (Question #2)	p-value	Result
Gender	<.001	Significant
Age	.225	Not Significant
Tenure Status	.274	Not Significant
Discipline	.386	Not Significant
Institution	.223	Not Significant

Table D18. Chi-square. Attendance by demographics.

Independent Variable *Likeliness (Question #5)	p-value	Result
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Gender	<.001	Significant
Age	.338	Not Significant
Tenure Status	.000	Significant
Discipline	.157	Not Significant
Institution	.372	Not Significant

Table D19. Chi-square. Likeliness by demographics.

Independent Variable *Often Attend (Question #6)	p-value	Result
Gender	<.001	Significant
Age	.134	Not Significant
Tenure Status	<.001	Significant
Discipline	.153	Not Significant
Institution	.374	Not Significant

Table D20. Chi-square. Often attend by demographics.

Independent Variable *Importance General (Question #9)	p-value	Result
Gender	.061	Not Significant
Age	.575	Not Significant
Tenure Status	<.001	Significant
Discipline	.845	Not Significant
Institution	.779	Not Significant

Table D21. Chi-square. Importance general by demographics.

Independent Variable *Usefulness (Question #10)	p-value	Result
Gender	.001	Significant
Age	.195	Not Significant
Tenure Status	<.001	Significant
Discipline	.817	Not Significant
Institution	.194	Not Significant

Table D21. Chi-square. Usefulness by demographics.

Independent Variable *Importance at institution (Question #13)	p-value	Result
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Gender	.039	Significant
Age	.004	Significant
Tenure Status	.046	Significant
Discipline	.407	Not Significant
Institution	.521	Not Significant

Table D22. Chi-square. Importance at institution by demographics.

Independent Variable *How involved it should be (Question #14)	p-value	Result
Gender	.028	Significant
Age	.559	Not Significant
Tenure Status	.003	Significant
Discipline	.539	Not Significant
Institution	.350	Not Significant

Table D23. Chi-square. Involvement by demographics.

**Follow-Up Crosstabs for Significant Chi-squares**

Crosstab: Useful by Tenure Status						
			My tenure status is:			Total
			non-tenure track	tenure track	tenured	
How useful do you believe professional development activities on campus would be for your teaching?	very useful	Count	34	8	35	77
		Std. Residual	3.6	-1.1	-1.7	
	useful	Count	51	37	129	217
		Std. Residual	-0.2	0.6	-0.2	
	neutral	Count	10	15	61	86
		Std. Residual	-2.4	0.4	1.3	
	useless	Count	3	1	12	16
		Std. Residual	-0.4	-0.9	0.8	
	very useless	Count	0	2	7	9
		Std. Residual	-1.5	0.5	0.7	
Total		Count	98	63	244	405

Figure D3. Crosstab. Usefulness by tenure status.

**Crosstab: Importance @ Institution by Gender**

			Gender:		Total
			female	male	
How would you rate the importance placed on teaching development at your institution?	under emphasized	Count	89	86	175
		Std. Residual	1.2	-1	
	the right amount of emphasis	Count	84	116	200
		Std. Residual	-0.6	0.6	
	overemphasized	Count	6	17	23
		Std. Residual	-1.4	1.2	
Total		Count	179	219	398

Figure D4. Crosstab. Importance at institution by gender.

**Crosstab: Importance @ Institution by Tenure Status**

			My tenure status is:			Total
			non-tenure track	tenure track	tenured	
How would you rate the importance placed on teaching development at your institution?	under emphasized	Count	51	19	105	175
		Std. Residual	1.4	-1.6	-0.1	
	the right amount of emphasis	Count	42	40	118	200
		Std. Residual	-0.9	1.6	-0.2	
	overemphasized	Count	3	3	17	23
		Std. Residual	-1.1	-0.3	0.8	
Total		Count	96	62	240	398

Figure D5. Crosstab. Importance at institution by tenure status.

**Crosstab: Involved by Gender**

			Gender:		Total
			female	male	
How involved do you think an institution should be in promoting	extremely involved	Count	94	85	179
		Std. Residual	1.4	-1.3	
	somewhat involved	Count	80	115	195
		Std. Residual	-0.9	0.8	

professional development for faculty teaching on campus?	neutral	Count	8	16	24
		Std. Residual	-0.9	0.8	
	not involved	Count	0	3	3
		Std. Residual	-1.2	1.1	
Total		Count	182	219	401

Figure D6. Crosstab. Involved by gender.

Crosstab: Involved by Tenure Status						
			My tenure status is:			Total
			non-tenure track	tenure track	tenured	
How involved do you think an institution should be in promoting professional development for faculty teaching on campus?	extremely involved	Count	60	28	91	179
		Std. Residual	2.7	0	-1.7	
	somewhat involved	Count	31	30	134	195
		Std. Residual	-2.2	-0.1	1.5	
	neutral	Count	4	5	15	24
		Std. Residual	-0.7	0.6	0.1	
	not involved	Count	0	0	3	3
		Std. Residual	-0.8	-0.7	0.9	
Total		Count	95	63	243	401

Figure D7. Crosstab. Involved by tenure status.

**APPENDIX F: Interview Findings**

Major Themes: General Perceptions and Motivations for Attending PD	Groups Represented (gender, tenure status, discipline, institution, years taught)	Salient Quotes
Professional development for teaching is useful, since things learned at these sessions can help keep teaching fresh and exciting.	<ul style="list-style-type: none"> <li>• Primarily female</li> <li>• Tenured and Non-tenure track</li> <li>• All disciplines</li> <li>• Both institutions</li> <li>• Range of years taught</li> </ul>	<p>“I really am concerned about keeping my teaching fresh and thinking about new ways to do stuff when I’ve gotten in a rut from teaching the same thing for many years in a row. When I’m feeling bored with the way I’m approaching something I just need to shake it up a little bit before it gets too dull. And I know I’m better at teaching when I’m excited about it.” (Juno)</p> <p>“I think it helps if you are just conscious of teaching. So if you aren’t spending all your time thinking, how can I explain this to somebody else, but you know, how can I do this so that somebody else might learn it better. I find that if I go to some of these workshops and things, it just kind of keeps those sort of issues in the front of my mind a little better.” (Jupiter)</p> <p>“Maybe [PD] was rewarding because of just the experience of knowing that somebody cared about putting us together to talk about teaching.” (Mars)</p>
Motivation to attend depends strongly upon the topic and who is involved in the session.	<ul style="list-style-type: none"> <li>• Primarily female</li> <li>• Tenured and tenure-track</li> <li>• All disciplines</li> <li>• Both institutions</li> <li>• Range of years taught</li> </ul>	<p>“What matters is the topic area of the activity. Also, if someone you know is involved.” (Diana)</p> <p>“It depends on who the faculty are. There are some faculty who are just phenomenal and it’s good to be in their company in terms of learning from them.” (Ceres)</p>
Collaboration with other faculty is the most important and helpful part of	<ul style="list-style-type: none"> <li>• Primarily female</li> <li>• Tenured and</li> </ul>	<p>“It’s great to solve problems with other faculty. It’s wonderful to listen to the kinds of things they do.” (Ceres)</p>

professional development.	<ul style="list-style-type: none"> <li>tenure-track</li> <li>All disciplines</li> <li>Both institutions</li> <li>Range of years taught</li> </ul>	“I’m very interested in meeting colleagues across campus and disciplines. I wish there would be more of that and more collaboration.” (Diana)
Faculty would like there to be more opportunities for professional development on campus.	<ul style="list-style-type: none"> <li>Both genders</li> <li>Tenured</li> <li>All disciplines</li> <li>Institution A</li> <li>Range of years taught</li> </ul>	<p>“I really would like to know who might be able to help me ask questions and figure things out more efficiently. Right now, frankly, I feel bewildered. Where do I start?” (Apollo)</p> <p>“I would love to see more professional development on campus.” (Ceres)</p>
Paying attention to teaching is important, and faculty should strive to be better at it.	<ul style="list-style-type: none"> <li>Primarily female</li> <li>Tenured, non-tenure track</li> <li>All disciplines</li> <li>Both institutions</li> <li>Range of years taught</li> </ul>	<p>“I really like teaching. I want to be good at it. I enjoy what I do. I personally think if you aren’t actively improving your teaching and recognizing that teaching techniques right now must be different from what they were 10 years ago, then you have a problem. Between technology and the way students behave/interact/view the world, it’s just different, and you can’t just do the same thing that worked for you. I think everyone should have to do [PD]. I think everyone should <i>want</i> to do it.” (Venus)</p> <p>“I think if you did a survey that said, ‘do you worry about your teaching?’ regardless of how good your evaluations are, you would find that 95 percent of the people were. ‘Do you feel bad as a professor after classes because you tried really hard and it didn’t work?’ Yes.” (Minerva)</p>

Table E1. General perceptions of teaching &amp; motivation for attending.

Major Themes: Graduate School Teaching Preparation	Groups Represented (gender, tenure status, discipline, institution, years taught)	Salient Quotes
There is a lack of teaching preparation during graduate	<ul style="list-style-type: none"> <li>Both genders</li> <li>All tenure</li> </ul>	“Faculty aren’t trained to teach, and then all of a sudden they get into these classrooms

school; this is an unfulfilled need that should be remedied.	<ul style="list-style-type: none"> <li>• statuses</li> <li>• All disciplines</li> <li>• Both institutions</li> <li>• Range of years taught</li> </ul>	<p>and are like, ‘what am I doing,’ and this has a negative impact on the students.” (Diana)</p> <p>“I hadn’t been instructed in any aspect of teaching by anyone at any time anywhere.” (Mars)</p> <p>“You gotta start with graduate students. At graduate school, training was next to nothing. I was visited for 20 minutes by one senior faculty member in a class that I was teaching. He came late, left early, met me in the hallway two days later and said, ‘You’re okay.’ And that was all I ever got in five years. I don’t know if anybody else had gotten more.” (Pluto)</p>
Adjuncting their own classes during graduate school helped some faculty learn teaching skills in a less-formalized, but still useful, way.	<ul style="list-style-type: none"> <li>• Both genders</li> <li>• All tenure statuses</li> <li>• All disciplines</li> <li>• Both institutions</li> <li>• Range of years taught</li> </ul>	<p>“The professional development I had when I was a grad student, I was an adjunct for a year. That was like baptism by fire professional development.” (Ceres)</p> <p>“I actually did teach a course for money in [graduate] school. It was a writing course that I guess thought of as being so basic that they let students teach it. My professor who hired me didn’t have any input into the process at all, so I could kind of do whatever I wanted. You don’t get taught how to teach in law school.” (Mars)</p>
Many faculty served as Teaching Assistants, but did not find this helpful in terms of learning how to teach effectively.	<ul style="list-style-type: none"> <li>• Primarily female</li> <li>• Tenured and non-tenure track</li> <li>• All disciplines</li> <li>• Both institutions</li> <li>• Small number of years taught</li> </ul>	<p>“I TA-ed a lot, so it was a lot of trial by fire, nothing formal. We had a TA orientation, but it was basically like, ‘Don’t sexually harass anyone. Here is a handbook.’ I would be the one to suggest ways to structure assignments or incorporate writing prompts, not [the people I was a TA for]. It didn’t work in the other direction. It was backwards. I had nothing specific offered to me. I was in engineering, too, so there was very little.” (Venus)</p>

Table E2. Graduate school preparation.

Major Themes:	Groups	Salient Quotes
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Time Constraints and Scheduling Issues, Work/life balance	Represented (gender, tenure status, discipline, institution, years taught)	
Time pressures often determine participation, especially for junior/new faculty.	<ul style="list-style-type: none"> <li>• Both genders</li> <li>• Specifically tenure-track</li> <li>• All disciplines</li> <li>• Both institutions</li> <li>• Range of years taught, but specifically newer faculty members</li> </ul>	<p>“Now that I am finished or have successfully won tenure, I feel like I have time to become the best in teaching.” (Apollo)</p> <p>“I can’t sit there and grade every paper and still have time. How do you do [new pedagogical techniques] and then even have a work/life balance yourself?” (Venus)</p> <p>“I am junior faculty, and I have done all of this. My research and my scholarship is completely outside of my job description. I am not paid on a contract that says I am supposed to do research. So the fact that I am juggling all of this and I get good course evals and I never was officially trained and I didn’t do a post doc...you know, throw me a bone, people.” (Venus)</p> <p>“I couldn’t attend all of [the PD sessions], and I wish I could have. They would have all been applicable to me, but as a new instructor I had to spend so much time on the specific content of the class that it was hard.” (Vesta)</p> <p>“I really thought about doing a faculty seminar, but the issue is time.” (Neptune)</p> <p>“I’m often interested in certain [sessions] but then I don’t have time. But I’m sure faculty who want to spend a little more time focused on that would take advantage of it. (Neptune)</p> <p>“I just don’t have the time to work it through [to learn to create new Powerpoints]... I just haven’t had time to really buckle down and do it.” (Mars)</p>
There are other competing pressures on faculty members’	<ul style="list-style-type: none"> <li>• Both genders</li> <li>• All tenure</li> </ul>	“Unfortunately some of those sessions I have not been able to attend because I have

time, especially for those with multiple roles.	statuses <ul style="list-style-type: none"> <li>• All disciplines</li> <li>• Both institutions</li> <li>• Range of years taught</li> </ul>	<p>[duties related to my Assistant Dean position.” (Ceres)</p> <p>“I had 49 advisees last year, which is a really heavy advisee load. It’s a lot of what I do. I’m starting to be in a place where I can say I do not want to take any more advisees because I just won’t be able to sleep normal hours if I do. So it’s a balance.” (Venus)</p> <p>“Those retreat weekends [we used to do for faculty PD] were very, very helpful but we found out that it took too much time for a whole weekend, especially for someone who had a family, because it put the strain on the spouse.” (Neptune)</p> <p>“It’s not that they’re disinterested so much as they’re trying to keep up with papers, recommendations, classes, family obligations, so it is a juggle. I mean, you’re juggling all these factors and you say, ‘what’s the most important?’” (Neptune)</p>
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Table E3. Time constraints/scheduling issues, work/life balance.

Major Themes: Frequency of PD Participation.	Groups Represented (gender, tenure status, discipline, institution, years taught)	Salient Quotes
Desired frequency of participation varies, but most people said they would attend professional development once a semester or more.	<ul style="list-style-type: none"> <li>• Primarily male</li> <li>• Primarily tenured</li> <li>• All disciplines</li> <li>• Both institutions</li> <li>• Range of years taught</li> </ul>	<p>“Usually I go once a semester, at least. Maybe one and a half on average.” (Jupiter)</p> <p>“I used to only go once a year, but I became much more likely to participate in non-research related university activities after I got tenure.” (Apollo)</p>
Some faculty would prefer ongoing groups for professional development.	<ul style="list-style-type: none"> <li>• Female</li> <li>• Primarily tenured</li> </ul>	<p>“I like ongoing groups. The dynamism of it is very nice, and it gives us each things to think about and to come back and to sort of</p>



	<ul style="list-style-type: none"> <li>• Social sciences</li> <li>• Both institutions</li> <li>• Specifically those with a greater number of years taught</li> </ul>	investigate more deeply.” (Ceres)
Some faculty would prefer short, one-time sessions.	<ul style="list-style-type: none"> <li>• Primarily male</li> <li>• Tenured and non-tenure track</li> <li>• Mostly science &amp; social science</li> <li>• Both institutions</li> <li>• Range of years taught</li> </ul>	<p>“Usually a three-hour workshop is what I see as ideal. [I used to participate in one that] would be once a week, like on Tuesdays from 3-5:30 pm, and that was very effective.” (Neptune)</p> <p>“I would go for an hour to learn a couple of new things.” (Mars)</p> <p>“I prefer hour to two hour workshops, not a whole day thing.” (Diana)</p>

Table E4. Frequency of participation in professional development.

Major Themes: Preferred Formats and Topics; Programming Suggestions.	Groups Represented (gender, tenure status, discipline, institution, years taught)	Salient Quotes
Most people prefer hands-on formats or mixed-formats/multiple modalities as opposed to lectures.	<ul style="list-style-type: none"> <li>• Primarily female</li> <li>• All tenure statuses</li> <li>• Mostly social sciences</li> <li>• Both institutions</li> <li>• Range of years taught</li> </ul>	<p>“I like hands-on. I think a good format is eclectic where there is some lecture, there’s some hands-on, there’s some individual work, there’s also some constructivism. I also like multiple modalities. I can’t sit and listen all day. I like visuals. I can remember a visual far more easily than I can remember a lecture.” (Ceres)</p> <p>“Hands-on stuff I do like except that I really hate role-playing.” (Juno)</p>
Food is essential.	<ul style="list-style-type: none"> <li>• Both genders</li> <li>• All tenure statuses</li> </ul>	“Every time you bring food it’s a good thing.” (Ceres)

	<ul style="list-style-type: none"> <li>• All disciplines</li> <li>• Both institutions</li> <li>• Specifically those with a greater number of years taught</li> </ul>	<p>“Food always helps. It doesn’t have to be elaborate food.” (Vesta)</p>
The term “professional development” is problematic; it should be changed.	<ul style="list-style-type: none"> <li>• Both genders</li> <li>• Tenured</li> <li>• All disciplines</li> <li>• Institution A</li> <li>• Specifically those with a greater number of years taught</li> </ul>	<p>“Professional development the word itself is problematic because it’s like professional education. I don’t like development and I don’t like in-service. That comes right out of the K-12 model. It’s almost like you’re not professional so we need to develop you. That’s not the way we need to look at it. It’s like professional growth and change. Development sounds like I said, it’s being done to you.” (Ceres)</p> <p>“I call it ‘continuing ed’ because we all learn.” (Neptune)</p>
Formats that allow for collaboration and asking the advice of other faculty members would be useful.	<ul style="list-style-type: none"> <li>• Both genders</li> <li>• Tenured</li> <li>• All disciplines</li> <li>• Both institutions</li> <li>• Range of years taught, but not those with very few</li> </ul>	<p>“Sometimes just sitting around talking with people about ideas or brainstorming about a particular class, like what do you feel like the problem is in the class and getting some ideas about how you could shake it up. Like here’s an problem that I’m having or I don’t know what to do in this situation and we can help each other figure that out.” (Juno)</p> <p>“The reason I prefer groups for this kind of thing is that other people bring questions I don’t have but can definitely benefit from. Maybe they have experience that I don’t have.” (Apollo)</p>
Sessions should focus on specific problems and topics, such as:	<ul style="list-style-type: none"> <li>• Both genders</li> <li>• All tenure statuses</li> <li>• All disciplines</li> <li>• Both institutions</li> <li>• Range of years taught</li> </ul>	<p>“Pedagogical techniques, particularly ways to engage in a seminar. What I am not very good at is finding ways to compel positively the quieter students to participate.” (Apollo)</p> <p>“I am looking to learn about an efficient method to present complex materials in a way that allows me to cover that which is necessary in a lecture while also allowing students to go and figure the rest out on</p>

		<p>their own.” (Apollo)</p> <p>“I would love some instruction about how to use Discussion Forums in the classroom.” (Apollo)</p> <p>“How to foster critical thinking by engaging other’s work, and the boundaries that need to be maintained for that to be legal.” (Apollo)</p> <p>“How to deal with teaching graduate and undergraduate students in the same classroom.” (Vesta)</p> <p>“Diversity in the classroom is a really big one, and that one seems key for most faculty at this point. I wouldn’t say many of us do that well.” (Venus)</p> <p>“Trying to figure out how to do active learning when you have a relatively large group of students and not a lot of time or help is a challenge.” (Venus)</p> <p>“Getting some knowledge about where kids that age are in terms of developmental stage would be quite helpful to me.” (Juno)</p> <p>“Workshops. Case studies. Methodology. The inculcation of the idea that teaching is a performance and if you’re not prepared to be a performer and develop interests and a heightened sense of attention...it’s the technique of getting kids to stay interested. It’s technical and it’s very much a performance. And you better have a fear of failure so a lot of it is psychological on the part of the instructor. It’s gotta be more than information. It’s how you deliver the message.” (Pluto)</p> <p>“How to explain what’s wrong with the B+ paper. How do you run a seminar that balances enough information with enough discussion. How to be an effective teacher</p>
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		<p>as you get older...how to be an effective teacher in your 60s and 70s. How to be an effective teacher in your late 20s and early 30s when you look the age of the students.” (Minerva)</p> <p>“What should you do when you get your teaching evaluations.” (Minerva)</p>
<p>Technology in the classroom is often an overused topic, but faculty would like help in specific areas.</p>	<ul style="list-style-type: none"> <li>• Both genders</li> <li>• All tenure statuses</li> <li>• All disciplines, but specifically social sciences and sciences</li> <li>• Both institutions, but specifically Institution B</li> <li>• Range of years taught</li> </ul>	<p>“You always get a lot of people talking about clickers. I only need to hear about clickers so many times. I am not that interested in using them. I would actually like technology to be broader. I know other people – and I am not one of them – who are interested in how to use Twitter in our classrooms. How can we have a better media presence? How do you bring technology to the classroom in a way that feels natural and not like you’re using it just because you can.” (Venus)</p> <p>“If it’s clickers I’m not interested. If it’s other kinds of technology then I’m probably interested.” (Juno)</p> <p>“The flipped classroom is another thing you hear about constantly.” (Venus)</p> <p>“I’d be interested in ways of electronic grading.” (Neptune)</p> <p>“I’d need a more focused thing. Like how to use, just as an example, advanced PowerPoint, how to create fabulous PowerPoints.” (Mars)</p> <p>“I want to get better at PowerPoint in the classroom. The later you get in the semester the worse my Powerpoints get.” (Diana)</p> <p>“Where should students be looking in a digital classroom? In the old days there was one person and you looked at them, and now you’re asking students to constantly transfer their attention from one thing to</p>

		another to another and I think how you learn how to manage that, how do you signal that to students.” (Minerva)
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Table E5. Preferred formats and topics; programming suggestions.

Major Themes: Communication, Messages, Incentives from Institution	Groups Represented (gender, tenure status, discipline, institution, years taught)	Salient Quotes
Support for teaching development varies on a departmental and school level. In general, professional schools are better about promoting teaching and professional development. There is a lack of institutional support overall.	<ul style="list-style-type: none"> <li>• Both genders</li> <li>• All tenure statuses</li> <li>• Professional schools = good support, Arts &amp; Sciences = less support</li> <li>• Both institutions</li> <li>• Range of years taught</li> </ul>	<p>“Institution A does a lot of things across the board, and I’ve always felt like I was pretty well informed about what’s available [for PD], but never felt any pressure that I had to do this...or else. I find it a little more persuasive if something comes from the school, actually, than the department. In a professional school, the school is often a bigger deal than the departments. Here I feel as much identity with the school as I do with the department.” (Jupiter, business school)</p> <p>“Teaching is extremely important [to the administration of my professional school]. They want their students to be satisfied. They want their students to graduate and be able to pass all the exams. To be leaders in the field. I really feel like this department works hard to make sure that we have leaders in our field.” (Vesta, nursing school)</p> <p>“I’ve never been in a place that makes you feel so much like if you’re not a good teacher you’re a bad human being.” (Minerva, professional school)</p> <p>“Teaching is important in my department, but I wouldn’t say that they particularly give us the message that development</p>

		classes or activities are something that we should do. So it's not really made clear where we're supposed to get new ideas for innovative teaching." (Juno, Arts & Sciences)
Stipends, even small ones, would help incentivize faculty to attend professional development. Grants would also help.	<ul style="list-style-type: none"> <li>• Both genders</li> <li>• Tenured, non-tenure track</li> <li>• All disciplines</li> <li>• Both institutions</li> <li>• Range of years taught</li> </ul>	<p>"They do pay us a little bit of money to go to those meetings and that, frankly, is a big incentive." (Juno)</p> <p>"A factor [in getting me to attend PD] would be some kind of incentive. An incentive that's very real and can also be withheld. I think the strongest incentive is going to be showing how it's relevant to promotion and tenure. And also money." (Apollo)</p> <p>"I hate to say this, but when I'm offered a little bit of money I'm prompted to do a lot of things. I can't really tell you if I would have [gone in the past] if I hadn't been offered money." (Mars)</p>
Faculty do not feel that professional development or methods to improve their teaching are valued in the tenure, promotion, and annual review processes.	<ul style="list-style-type: none"> <li>• Both genders</li> <li>• All tenure statuses</li> <li>• All disciplines</li> <li>• Both institutions</li> <li>• Range of years taught</li> </ul>	<p>"If it were valued on the annual review I'm sure more people would go." (Ceres)</p> <p>"[PD is] going to be more noticed and yield a much more positive response if it's clear that the chair prioritizes it and it's valued sufficiently by the administration. I want to get the idea that there are some resources behind it. The most important resource for a project like this is rewarding the time invested with something related to promotion and tenure to show it actually matters and is not just window dressing. It might just be a matter of labeling. Use big, bold letters. And a note, maybe: "This Can Be Put Into Your Professional Development Box." To me, that would show it's something the university cares about. Simply showing how an opportunity can be turned into a documentable act of service or teaching. If you have a number of these, it shows that you're invested." (Apollo)</p>
Messages from Department Chairs, Deans, and Provosts	<ul style="list-style-type: none"> <li>• Both genders</li> <li>• All tenure</li> </ul>	"If the Dean asked me to do something I would do it, absolutely." (Ceres)

<p>should communicate the importance of teaching and professional development, but for the most part, they do not. This would help encourage participation in professional development programming. Faculty feel that the administration does not care about teaching as much as it does about research.</p>	<p>statuses</p> <ul style="list-style-type: none"> <li>• All disciplines</li> <li>• Both institutions, but specifically Institution B</li> <li>• Range of years taught</li> </ul>	<p>“If our faculty receive something from their chair saying the provost really wants us to take initiative and get involved in this, then that would certainly bump up attendance by quite a few seats.” (Apollo)</p> <p>“The administration does not value teaching. I think my boss appreciates the fact that I care about the teaching and that I get good course evaluations. I think she cares about the visibility of our program to the administration. “ (Venus)</p> <p>“My department chair doesn’t talk much about teaching, mostly about grants. As long as people aren’t complaining about your teaching, you are fine. You just have to do the bare minimum to get by. But it needs to be rewarded. Nothing is rewarded here.” (Diana)</p> <p>“I don’t think that the department puts great weight on professional development activities per se.” (Jupiter)</p> <p>“If my department chair tells me I should go to something, I go to it. I think it should be disseminated to the chairs and perhaps if the chair notices something that would be particularly good for a new employee or an employee who could use help in a certain area and found like that was something that was applicable to them, then maybe the chair could say, ‘I really think you should go to this.’” (Vesta)</p> <p>“[PD] is not encouraged. I don’t think that it’s been highlighted that much. We used to have [more initiatives] in our department. What it comes down to is, do we have financial support from the Provost’s Office or from the teaching center?” (Neptune)</p> <p>“I don’t think [teaching is] particularly important to them [the administration]. I</p>
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		don't know what is important to them at this point. I think saving money is. And I think seeming cool is, and I think doing things that get press is." (Mars)
Presentation matters; faculty do not want to feel pressured into going to professional development.	<ul style="list-style-type: none"> <li>• Primarily female</li> <li>• Primarily tenured</li> <li>• Social sciences</li> <li>• Both institutions</li> <li>• Range of years taught</li> </ul>	"It's the way it's presented. If it's like, 'you're really deficient in this, you really stink, we really need to get you better in this,' and as much as I'd like to do that sometimes, I'd like to say to somebody, 'you really ought to get your act together and take this course,' but I think if it can be phrased in a way that the bottom line is, 'we're here for the students and it will improve the way we work with students and educate them.' I think if we can make the students the focus, then the possibility of victimization in some way is eliminated." (Ceres)
Institutions should more clearly communicate with faculty members about what kinds of professional development programs are offered.	<ul style="list-style-type: none"> <li>• Primarily male</li> <li>• Primarily tenured and tenure-track</li> <li>• All disciplines</li> <li>• Primarily Institution A</li> <li>• Range of years taught</li> </ul>	"To be honest, after that first training session [I attended], I just didn't know afterwards where to get help with that stuff if I needed it. I just didn't know who to follow up with or whom to call. Maybe that's my own laziness...but I also thought it just wasn't obvious to me where to get help. I had to do SO much research." (Apollo)

Table E6. Communication, messages, and incentives from institution.

Major Themes: Required v. Not Required Professional Development	Groups Represented (gender, tenure status, discipline, institution, years taught)	Salient Quotes
For the most part, required professional development would upset faculty members.	<ul style="list-style-type: none"> <li>• Both genders</li> <li>• All tenure statuses</li> <li>• All disciplines</li> <li>• Both institutions</li> <li>• Range of</li> </ul>	<p>"Required seems a little heavy-handed." (Jupiter)</p> <p>"You can't do it. We're by nature anarchists, and ungovernable. It's the incompetent leading the ungovernable." (Pluto)</p>



	years taught	<p>“It would piss me off.” (Juno)</p> <p>“I just wouldn’t go. I don’t think you can require that.” (Apollo)</p> <p>“Required doesn’t make me feel warm and fuzzy. That’s what this is about, right, is that you want to get a warm and fuzzy feeling?” (Diana)</p> <p>“Everybody has their talents and needs help in different areas, so maybe to require someone to go to something where they don’t need help in that area would seem silly and not a very good use of their time.” (Vesta)</p>
In some cases, required professional development would increase attendance, and people would not mind it.	<ul style="list-style-type: none"> <li>• Female only</li> <li>• All tenure statuses</li> <li>• Social sciences</li> <li>• Both institutions</li> <li>• Range of years taught</li> </ul>	<p>“Personally I don’t care. If it’s valuable I’ll do it. If it’s required, it’s required, you know? We all have things we have to do. I think often times we’re reluctant because we’re afraid, and doing something different or that we don’t understand kind of frightens us. No one wants to be told what to do. It’s got to be presented in a way where you respect a person’s expertise.” (Ceres)</p> <p>“If it’s mandatory attendance or you have to be there for a certain amount of time because it’s on campus, the visibility helps because you know there will be some administrative people that you will happen to see there, and you can do sort of a meet and greet. I am pretty likely to go to these, so my reaction would be, ‘Ha ha, now everyone else has to go.’” (Venus)</p>
Faculty think that some forms of professional development should be required for certain groups, especially for junior faculty members.	<ul style="list-style-type: none"> <li>• Female only</li> <li>• All tenure statuses</li> <li>• Social sciences</li> <li>• Both institutions</li> <li>• Range of years taught</li> </ul>	<p>“Personally I would require every faculty to have a course in student development theory. You certainly would improve our ability to key in on kids who are having issues. We might be able to better address some of the difficult issues we have on campus.” (Ceres)</p> <p>“Junior faculty are desperate and they’ll do anything if they think it will help them get</p>

		tenure. They're afraid to say no to things because they're afraid it will affect their chances at tenuring. But I do think that it's important to have these things available especially for junior faculty who might be having trouble when they're first starting because at least then they can say if they get a difficult evaluation in their second year review they can show in their fourth year review look, I [attended PD] and I'm working on it. So that actually is an important protective thing for them." (Juno)
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Table E7. Required versus not required professional development.

Major Themes: Teaching and PD in Higher Education and Professional Organizations	Groups Represented (gender, tenure status, discipline, institution, years taught)	Salient Quotes
Professional organizations (based in disciplines) can and should help with professional development for teaching	<ul style="list-style-type: none"> <li>• Both genders</li> <li>• Tenured and tenure-track</li> <li>• All disciplines</li> <li>• Both institutions</li> <li>• Range of years taught</li> </ul>	"Professional organizations care about undergraduate teaching, and they focus on these at annual meetings because they can. Bio groups have whole sessions at conferences about it. But the smaller organizations are too small and don't focus on teaching at their conferences." (Diana)
Higher education as a whole should incentivize and reward professional development and good teaching.	<ul style="list-style-type: none"> <li>• Primarily female</li> <li>• All tenure statuses</li> <li>• All disciplines</li> <li>• Both institutions</li> <li>• Range of years taught</li> </ul>	"There should be some kind of a clear indication that it would be rewarded to participate in it. I think it has to be as basic as incentives and showing that there is some reward other than just feeling good. And that doesn't mean that they have to give you lots of money or anything like that, but really recognizing good teachers, not just at the end of your career. Just signaling in lots of different ways that they care about teaching...that's where it has to begin. Because the signals right now [at Institution B] are that clearly research is more important, so why bother with teaching? (Juno)

		<p>“Just make it part of our promotion process. Reward good teaching! We have a merit-based salary increase every year...they can look at your performance, they can do a little better than a 2.2% increase. They can offer awards...all sorts of things.” (Venus)</p>
<p>Institutions should know what their unique mission is and how teaching fits into it.</p>	<ul style="list-style-type: none"> <li>• Male</li> <li>• Tenured</li> <li>• All disciplines</li> <li>• Both institutions</li> <li>• Greater number of years taught</li> </ul>	<p>“Teaching is important at all business schools and law schools. I think particularly most of the top business schools have only graduate students and no undergrads, and it’s the whole thing where the students are paying their own money to go there, and they are older, so they are a little more demanding about what they want to get out of it.” (Jupiter)</p> <p>“Each President and each board has to understand what its institution is all about. They don’t talk about it enough.” (Pluto)</p>
<p>University teaching has become bifurcated between full-time, non-tenure track teachers/lecturers and tenured faculty who do research, and this is a problem for teaching, teachers, and the university.</p>	<ul style="list-style-type: none"> <li>• Male</li> <li>• Tenured, non-tenure track</li> <li>• All disciplines</li> <li>• Specifically Institution B</li> <li>• Range of years taught</li> </ul>	<p>“The idea of teaching becoming bifurcated at the university level is unfortunate because it means that assumptions are made and pressures are placed on people for things they are not really valued to do. In other words, a top research professor could be a really bad teacher, and as long as they don’t set the classroom on fire it really isn’t going to matter. While they might appreciate some help teaching it might be better to focus on them as researchers whereas this increasing cadre of people who are non-tenured track lecturers who have high teaching loads, conversely, the university is not investing in these teachers. (Mars)</p> <p>“There’s a sense that if we praise our lecturers to high heaven and tell them how valuable they are but we actually don’t reward them, and we treat them a little bit like cogs in a machine, that delivers the best of both worlds from [the institution’s] point of view. If things get tense we’ll just praise them even more. And that is going to ultimately break down. When upwards of 40 percent of your teaching staff are non-tenured lecturers it isn’t sufficient any</p>

		<p>longer to say we'll just tell them how great they are. That isn't going to satisfy them, and it certainly isn't going to improve their teaching because it has nothing to do with their teaching. Now you've got a staff who are almost completely justified based on their interactions with students and their ability to teach, and I think it places a huge responsibility on the institution to define what it means by teaching." (Mars)</p> <p>"That's been the biggest change in my profession over the last 50 years. Senior faculty no longer teach introductory courses, and they teach half a teaching load. My load here was full when I came. That got cut in half. That's why you've got too many adjuncts. We created the problem ourselves." (Pluto)</p>
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Table E8. Teaching and PD in higher education and professional organizations.

Major Themes: Critiques of Professional Development	Groups Represented (gender, tenure status, discipline, institution, years taught)	Salient Quotes
Professional development programming is not always useful.	<ul style="list-style-type: none"> <li>• Both genders</li> <li>• All tenure statuses</li> <li>• All disciplines</li> <li>• Both institutions</li> <li>• Range of years taught</li> </ul>	"I found [the PD facilitator] to be so intellectually situated that I found the thoughts to be hard to understand to begin with, but impossible to apply. I said it to the whole faculty and got looks of silent horror that I had said this. It's kind of like I write them off for that part. Members of the faculty said that it was one of the best conversations they'd had and I was just appalled. Stuff like that tells me to stay away from as many people as I can." (Mars)
Professional development is presented at too low a level.	<ul style="list-style-type: none"> <li>• Female</li> <li>• Tenured</li> <li>• Social sciences</li> <li>• Both institutions</li> </ul>	"One problem is when the person who does it presents the material at such a low level. It's so obvious and it's sort of insulting. Nobody who is teaching in a university doesn't have the capacity to absorb information relatively quickly, rapidly, and

	<ul style="list-style-type: none"> <li>• Greater number of years taught</li> </ul>	ought to be presumed to want to do something. If they're not doing it it's because they have an alternative thing. So the whole conversation ends up being, on the one hand, way too slow to absorb anything useful because it's taught as if nobody's ever taught. And secondly, it ends up with people feeling very defensive." (Minerva)
Professional development about technology is overdone.	<ul style="list-style-type: none"> <li>• Female</li> <li>• All tenure statuses</li> <li>• Social sciences</li> <li>• Both institutions</li> <li>• Range of years taught</li> </ul>	<p>"I don't know if I would really want to sit through a demonstration of new technology because I'm just kind of suspicious about technology being the solution for everything." (Juno)</p> <p>"[The technology session I attended] wasn't helpful at all. It seemed like it was a commercial for iPads." (Diana)</p>
Professional development sessions often degenerate quickly, especially when faculty use it as an outlet to vent.	<ul style="list-style-type: none"> <li>• Female</li> <li>• All tenure statuses</li> <li>• All disciplines</li> <li>• Both institutions</li> <li>• Range of years taught</li> </ul>	<p>"I'll tell you why I think a lot of [PD sessions] fail: let's have a thing where we all talk about this problem or we all talk about teaching. I think they try. I think they make an effort. But in a discussion style session the thing ends up being, instead of a space where people can say, 'here's the thing I would like to do better,' you have all sorts of colleagues who you know are mediocre teachers quite frankly telling you like you're a fool what they do. My teaching evaluations are usually between 4.5 and 5. I love thinking about teaching. But to sit there with people who have 3.8s lecturing me? That whole conversation becomes incredibly annoying." (Minerva)</p> <p>"It's not helpful and instead becomes either show-off-ness or defensiveness." (Minerva)</p>

Table E9. Critiques of professional development.

Major Themes: Perceptions of Other Faculty Members	Groups Represented (gender, tenure status, discipline, institution, years	Salient Quotes
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	taught)	
Only the faculty who care about teaching make the effort to attend professional development.	<ul style="list-style-type: none"> <li>• Primarily female</li> <li>• All tenure statuses</li> <li>• Primarily social sciences</li> <li>• Both institutions</li> <li>• Range of years taught</li> </ul>	<p>“Only the people who care about teaching show up, sign up for this.” (Juno)</p> <p>“I really feel like the people who need to go to the teaching stuff don’t do it. That’s part of the issue; it’s not people like me, who are pretty committed. It’s people who aren’t necessarily sold on the concept who need to go.” (Venus)</p>
Faculty know of colleagues who are bad teachers who would benefit from professional development.	<ul style="list-style-type: none"> <li>• Both genders</li> <li>• All tenure statuses</li> <li>• All disciplines</li> <li>• Both institutions</li> <li>• Range of years taught</li> </ul>	<p>“There are many [in my department] who don’t know much about technology.” (Apollo)</p> <p>“The problem is that many people, by the time they get tenured, have been teaching long enough that certain habits have become ingrained. It’s better to achieve these developmental interventions before.” (Apollo)</p> <p>“There are professors in our program who are much less accessible, some by choice and some because they just don’t realize they’re being inaccessible, whether they say things in the classroom that are offputting or their office hours are ridiculous or they just don’t make the time. They don’t respond to e-mail or they are disorganized, and it puts a very heavy burden on the people who are responsive.” (Venus)</p> <p>“I think many of them – it’s not that they don’t care, although I do know a handful who don’t – but the rest probably need a little bit of help. I would be glad [if it were required] because there are a lot of people who really need to hear this stuff.” (Venus)</p> <p>“I think most people’s problems are totally obvious. I’d probably be able to guess with 80 percent accuracy what the evaluations say after one class because a lot of people just mess up things that are easy to fix.” (Minerva)</p>

<p>It is difficult to get faculty to do things (like go to professional development), even when it would help them. Some faculty believe this is due to conceit on the part of their colleagues.</p>	<ul style="list-style-type: none"> <li>• Both genders</li> <li>• All tenure statuses</li> <li>• All disciplines</li> <li>• Both institutions</li> <li>• Range of years taught</li> </ul>	<p>“Who are these lunatics who don’t want to learn [student development theory]? As a professor, why would you not want to know that?” (Venus)</p> <p>“If you refuse to try it, you’re being obstinate or you don’t think you have a problem or you don’t recognize you’re failing to keep up with the times and connect with your students. Maybe you believe you are a prodigy in teaching and need no help...so I don’t know what the problem is.” (Venus)</p> <p>“There’s got to be a different approach because you gotta get old people like myself or other people to learn what technology’s going to do to your teaching.” (Pluto)</p> <p>“This faculty is very complacent and interested only in what they’re doing for the most part.” (Neptune)</p> <p>“Watch out for the anxiety and show-off-ness [in PD sessions]. A ton of stuff here also disintegrates into, ‘if you have laptops in the classroom are you a bad teacher?’ And there’s a whole group of people here who say you’re a bad teacher [if you do]. (Minerva)</p>
<p>Faculty members can be criticized by others for appearing to care too much about teaching and not enough about research.</p>	<ul style="list-style-type: none"> <li>• Primarily female</li> <li>• Tenured and tenure-track</li> <li>• Law and science</li> <li>• Both institutions</li> <li>• Range of years taught</li> </ul>	<p>“If you’re seen as somebody who wastes time on your teaching then you’re not someone who is working on your grants.” (Minerva)</p>

Table E10. Perceptions of other faculty members.

Major Themes: Tension in Research v. Teaching	Groups Represented (gender, tenure status, discipline, institution, years taught)	Salient Quotes
<p>Institutions send faculty the message that research is more important than teaching. With limited time, it is difficult to excel in both areas.</p>	<ul style="list-style-type: none"> <li>• Both genders</li> <li>• All tenure statuses, though non-track recognize they are not required to do research as much as their peers are</li> <li>• All disciplines</li> <li>• Both institutions, but specifically Institution B</li> <li>• Range of years taught</li> </ul>	<p>“I’d say the message is much clearer that research is important compared to teaching, which means that if you have a limited amount of time, you’re more likely to put your time in research.” (Juno)</p> <p>“My boss always says to publish and get grants. The teaching is nice, but publish and get grants. I am hearing what she is saying, and I understand I need to not think about A+ level in the classroom because then I end up putting C+ level effort into my research. My summers are just crazy with research.” (Venus)</p> <p>“My boss always tells me no matter how many wonderful teaching things I have on [my annual report], it just doesn’t matter if I don’t have grants.” (Venus)</p> <p>“I’m clinical faculty, so I have a lot of focus on teaching versus research. It makes it a little easier for me, but I know my peers who are responsible for doing research that’s a hard balance for them.” (Vesta)</p> <p>“The conflict between teaching and research has never been really reconciled. It’s not an accident. It’s an accident when a great scholar is a great teacher. It’s an accident. The faculty is convinced that the research agenda tops the teaching agenda. And it may, I don’t know. Considering the fact that the one really doesn’t have the same talent as the other, unless you get very lucky, I don’t know how you reconcile the two. They know the two things they gotta do are teaching and research. How do you become very good in both?” (Pluto)</p>



		<p>“It’s fairly time consuming, if I were maintaining any kind of [other work]. I’d probably have to shift most things into the summer and not teach in the summer. It’s just a herky jerk. I know people who do it. I think partly he does it by not being available as much to the students...I don’t think that schedule would appeal to me.” (Mars)</p>
Faculty believe that research matters in the tenure process more than teaching.	<ul style="list-style-type: none"> <li>• Both genders</li> <li>• Tenured and tenure-track</li> <li>• All disciplines</li> <li>• Both institutions, but primarily Institution A</li> <li>• Range of years taught</li> </ul>	<p>“Over the last few years when I was coming up for tenure, the only thing I cared about was keeping my research up. That was the determining factor; that was the criterion by which my case would be decided.” (Apollo)</p> <p>“Teaching was one of the lesser qualifications for tenure here. It’s publishing first, then teaching, and then lastly service. I was chair for 15 years, and the people who went up for review, that was the focus, research.” (Neptune)</p>
Teaching only has to be at the bare minimum in order to succeed in winning tenure and in keeping one’s job.	<ul style="list-style-type: none"> <li>• Both genders</li> <li>• Tenured and non-tenure track</li> <li>• All disciplines</li> <li>• Both institutions</li> <li>• Fewer number of years taught</li> </ul>	<p>“You would have to teach at a minimum competency. The research is 90% of the [tenure] case, though. Nobody ever pretended it wasn’t that way. Everyone was always very clear to me. They do say very explicitly, ‘as long as your teaching doesn’t raise any red flags, then don’t worry about it. Don’t try to perfect your courses. Get your books out.’” (Apollo)</p> <p>“Most students don’t realize that we have to do research and that course evals don’t really matter.” (Venus)</p> <p>“I have NO knowledge of this because it’s a completely non-transparent process – but what I have heard through the grapevine is that [the administration] don’t care at all about your course evaluations unless you score below a certain level. In that case, they’ll fish them out and say, ‘What’s going on with this person?’ Other than that, I have heard they don’t really care. If you’re getting two big grants a year, they’re not going to fire you. You basically have to</p>

		care yourself whether your students enjoy your class and whether they can learn and whether you're providing a service.” (Venus)
Some faculty care equally about research and teaching, and some professional schools pay more attention to teaching.	<ul style="list-style-type: none"> <li>• Primarily female</li> <li>• Tenured and non-tenure track</li> <li>• Social sciences</li> <li>• Both institutions</li> <li>• Range of years taught</li> </ul>	<p>“Many other faculty are like, ‘research! And, oh yeah, I have to teach.’ But you can be excited about both. I am genuinely excited about both.” (Venus)</p> <p>“The reality is, however much people are like, ‘oh, all anybody cares about is research,’ that’s actually just BS. Actually nothing about your research is noticed. Nobody notices your research. You never get patted on the head, so the only thing that you get evaluated on is this anonymous report that comes through the system so teaching feels like the thing that’s the coin of the realm even though everybody pretends that it’s not. Everybody has this thing where it’s not, but it is literally the only thing where you get a metric that tells you where you compare to everybody else. We live in this mythical world where everybody is like, ‘oh, we’re in a research university. The thing you’re supposed to say in a research university is nobody cares about the teaching, but actually everybody cares about the teaching, and everybody is obsessed with the teaching. Everybody wants to win the teaching award, and everybody wants to be the most popular teacher and loved by their students because on a day to day basis that’s the only people you interact with and nobody notices what you write.” (Minerva)</p>

Table E11. Tension in research/teaching.

Major Themes: Gender/age/race Issues	Groups Represented (gender, tenure status, discipline, institution, years taught)	Salient Quotes
Faculty realize the student population is changing, and they would like more information on how to work with students from more diverse backgrounds, including those with disabilities, mental illnesses, and international students.	<ul style="list-style-type: none"> <li>• Primarily female</li> <li>• Tenured and non-tenure track</li> <li>• Primarily social sciences</li> <li>• Both institutions</li> <li>• Range of years taught, but toward the low end of the range</li> </ul>	<p>“I’d like to see a workshop so that we are better able to help those first generation, students of color, to help them negotiate the system because many of them we’re seeing, they’re taking care of parents. The population is changing, and even our most entitled children are coming with mental illness, they’re coming with a lot of issues and we need to be able to be attuned to that. International students also have a hard time here. We need to understand all the factors that are influencing their performance.” (Ceres)</p> <p>“Some people can’t learn if it’s not hands-on. Some people have disabilities and won’t benefit from someone just writing on chalkboards.” (Venus)</p>
Faculty know that their own race, gender, age, and appearance affect how they are perceived in the classroom. Some of them worry about this throughout their careers.	<ul style="list-style-type: none"> <li>• Female only</li> <li>• Tenured, non-tenure track</li> <li>• Social sciences</li> <li>• Both institutions</li> <li>• Range of years taught</li> </ul>	<p>“I think as you get older your teaching evaluations go down. I work much, much harder now than I did when I was younger to seem not old. To seem not irrelevant in the classroom. I think that young people like young people. As I’ve gotten older my teaching style has changed. I’m a much more effective teacher now than I was when I started even though I got high evaluations, but they were kind of fake. They’re fake from being young.” (Minerva)</p> <p>“They’ve done these studies that show that people basically decide within the first five minutes of the course whether they’re going to like your course or not. So if you’re a young person who comes in, if you’re an attractive person. If you’re a white man who looks like what you’re supposed to look like, those five minutes go in your favor. As you get older, if you’re a woman, if you’re a person of color, those first five</p>

		<p>minutes have gone against you.” (Minerva)</p> <p>“That [attractive, white, man], he had no ability to be reflective about the ways in which his burdens in teaching were very different.” (Minerva)</p> <p>“In my early classes, there were some really awful things said. Really awful, mean, mean, mean boys, which is what I would call them. People write that stuff all the time. She’s ugly. She doesn’t wear the right clothes, her clothes are horrible. Why did she change her hair in the middle of the semester?” (Minerva)</p>
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Table E12. Gender/age/race issues.

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