THROUGH EXPERIENCES, FROM INTERACTIONS, AND BY CHOICES OVER TIME:
HOW PROFESSORS AT A RESEARCH UNIVERSITY UNDERSTAND AND EXPLAIN
THE FACTORS THAT HAVE INFLUENCED THEIR TEACHING

By

Gregory John Steele

A DISSERTATION

Submitted to
Michigan State University
in partial fulfillment of the requirements
for the degree of

Higher, Adult, and Lifelong Education – Doctor of Philosophy

2019

ABSTRACT

THROUGH EXPERIENCES, FROM INTERACTIONS, AND BY CHOICES OVER TIME: HOW PROFESSORS AT A RESEARCH UNIVERSITY UNDERSTAND AND EXPLAIN THE FACTORS THAT HAVE INFLUENCED THEIR TEACHING

By

Gregory John Steele

The intent of this study was to understand professors at a research university, and how the environments and individuals they interact with influenced them and their teaching. The primary research question for this study was, "How do professors at a research university understand and explain the factors that have influenced their teaching?" The secondary research question was intended to focus on the institutional factors that had the most influence on a professor and their teaching: "What are the most influential factors that affect a professor's teaching at a research institution?"

I interviewed 15 award-winning professors from Michigan State University (MSU) about how they had been prepared, supported, and recognized for their work as teachers. My analysis showed how little preparation the professors received about teaching at a research university, how they relieved more on experience and trusted peers than any of the available campus resources, and how they tended to find personal student recognition more rewarding than their prestigious teaching awards. My results showed how institutional deficiencies (the lack teaching preparation, applicable resources, and sufficient recognition) created obstacles for the professors to overcome as they progressed and developed as teachers. To lessen or remove the institutional obstacles, I recommend research universities better assess and recognize a professor's teaching, faculty developers localize their available resources to the individual colleges and departments, and professors utilize their peers and self-reflection as a way to meet their needs and

expectations as teachers. Professors at research universities are expected to prioritize their teaching and scholarship, but the importance of the former can become complicated when institutions place a greater emphasis on the latter (via the tenure process, promotions, raises, and rewards). This study extends previous scholarship which shows that professors at research universities are not sufficiently prepared, supported, or recognized for their work as teachers. If the individual institutions do not properly prepare their professors as teachers, then there is uncertainty as to how, where, and why the individual professors succeed and develop as teachers.

Dedicated to Walter B. Dulak.
You saw this far before I ever did, and I am sure you can see this now.

ACKNOWLEDGEMENTS

To Alana, JoAnne, and Kris

As a man, I have always been blessed to be surrounded by strong women, with stronger opinions, and the biggest hearts. They have always wanted the best for me and have never shied away from telling me what I needed to hear (even – and especially – when I did not necessarily want to hear it). I am forever grateful for the love, support, guidance, and encouragement they have given me along the way. I would not be the man I am if the three of them were not the women they are.

To Kris, I think often about all the conversations we have had over the last 16 years and how many times I have sought out your advice and guidance. Yet, I am so thankful for how rarely you ever immediately or directly answered any of my questions. Rather, you talked me through them, helped me understand what I was really asking, and let me come to my own conclusions before adding in any of your own advice or direction. Of all the things you have taught me, it is trusting myself, my abilities, and my answers that I have come to value and appreciate the most. I would say I will miss our conversations, but I find solace and relief knowing that they will continue.

To my Mom, I will forever be amazed and motivated by the number of guarantees in your life you sacrificed just to give me more opportunities in mine. I cannot fathom that level of selflessness, yet I have spent much of my life trying to make the most of everything you have given me and the lessons you have taught me. I know you are proud of me, but I hope you know how proud I am of you, too. You are the smartest and strongest person I know, and your emphasis on meaningfulness and relationships has certainly made me and my life better for it.

You are my verb "to trust," and I am thankful for how hard we work to never let each other down.

To Alana, this does not happen without you. No question. For all the times I doubted myself or thought I could not do this, you always knew I could. You never doubted me. Not once. I will forever be amazed by and thankful for your love, support, and willingness to tell me when it was time to stop complaining and start writing again. You have been my strongest supporter and helped me celebrate each and every victory along the way (even when I did not want to, because I was already too busy looking ahead to the next challenge). You have taught me to be stronger, more confident in myself, and more appreciative of all my accomplishments (no matter their size). As much I have enjoyed completing this journey, what I have enjoyed most is having you by my side throughout it all. Thank you. I look forward to a lifetime of more adventures, accomplishments, and celebrations with you. You are the best. I love you.

TABLE OF CONTENTS

# LIST OF TABLES

LIST OF FIGURES

**CHAPTER ONE: INTRODUCTION**

**What a Professor Does for a Living**

Given all that a professor's job entails, it can be challenging for a professor to explain what they do in a manner that is equally complete and concise. Take, for example, the conundrum Dr. Wright, a professor at the local research university, often finds himself. Dr. Wright has been working at the institution long enough to be considered one, too. Yet whenever Dr. Wright meets someone new and they ask what he does for a living, the answer is not always an immediate one. In these instances, Dr. Wright often pauses and smiles, before explaining that he is a professor at the local university. Dr. Wright's usual delay is not due to a lack of education or experience, as he has been tenured for decades, taught hundreds of classes, produced numerous scholarly articles and books, sat on many committees, attended plenty of meetings, and has answered similar questions about his occupation more times than he cares to admit. Nor is the delay reflective of any lack of eloquence, as Dr. Wright regularly finds himself facilitating class discussions, presenting to groups and rooms of varying size, writing articles, book chapters, and daily emails, and proudly offering his opinion in any of the meetings he may find himself in on a given day. Dr. Wright often pauses because simply saying he is a "professor" would say too little of his many responsibilities at – and to – the university, and saying he is a "teacher" might not be saying enough about everything that entails.

As a professor, Dr. Wright considers his most important job to be teaching. Dr. Wright has always revered the opportunities a classroom affords; he professes his knowledge in lectures, engages his students in discussions, and attempts to teach as inimitably as possible. Teaching was not something Dr. Wright was ever specifically taught or trained to do, but something he had to do from the very beginning of his career as a professor (when asked how he learned how to

teach, he will tell you a long story about being an overwhelmed and unprepared small town freshman at a big city university). As a professor, Dr. Wright learned how to teach over time by repeating what went well in the classroom, reworking what did not, reflecting on his teaching as much as he could, and reaching out for help when he needed it (it is the same learning process he uses to teach his students). Though Dr. Wright often wishes the universities he has worked at had done more to help him develop as a teacher, he also understood their priorities, and heeds the same advice often he gives to his students: taking responsibility for his learning and not blaming others for what he can do for himself. Dr. Wright will say he is not a very good teacher (though his annual evaluations, numerous awards, and box of thank you notes say otherwise) primarily because he knows he can always become a better one.

When Dr. Wright started teaching over three decades ago, he stood in front of the class and professed. Classroom technology was chalk and blackboard for him, and pencil and paper for his students. Teaching was a transaction of knowledge provided to his students, rather than an interaction with his students. Dr. Wright's classroom changed over time, both inside and out, as teaching became a more complicated exercise of expectations and assessments. Lectures acquired co-authors (in the form of curriculum guidelines and departmental recommendations), technology became inescapable and unavoidable (screens in front of everyone), tenure became more elusive and exclusive amongst his peers, and end-of-the-semester class evaluations became a way to judge Dr. Wright's teaching (rather than a tool for him to better it). Dr. Wright's classrooms stayed the same size (though they can sometimes feel more crowded with the bigger class sizes and additional expectations), but his passion for teaching has only grown over time, too.

Teaching is more important to Dr. Wright than it was when he began as a professor, even

though it is more complicated now, and can sometimes even feel burdensome (there are more pressures now, more people involved, and more expectations to exceed – let alone meet). The act of teaching has not necessarily become any more complex (it is, after all, still Dr. Wright talking to a room full of students), but it is everything and everyone else that can complicate his teaching so much (if he lets it). As much as he can, Dr. Wright tries to keep his teaching simple, focusing on ensuring his students are learning the content, checking in with his students throughout the semester (simultaneously assessing their learning and his teaching), and savoring the type of interactions and fulfillment teaching provides him. For all that has changed over time, Dr. Wright has never stopped loving teaching, working to be better at it, and appreciating the opportunities it continues to afford him.

So, when Dr. Wright finishes his pause, he typically explains what he does for a living by saying he teaches at the university (sometimes followed by his research, if only to mention briefly what he has spent so much of his life doing). Teaching is not all Dr. Wright does as a professor (per his contract, it accounts for 50% of his assignment), but it is how his students recognize him around campus, where he locates much of his pride, what he is still learning to do better, and where his answer to, "What do you do for a living?" always starts.

### Teaching at Research Universities

The relationship between a professor's teaching and their institution was historically a straightforward one, predicated on professors teaching at their institutions. Given that colleges and universities have been defined as "institutions that exist to provide instruction" (Barr & Tagg, 1995, p. 13), it is understandable why a professor's teaching was positioned as their most important role at – and responsibility to – their institutions. Professors functioned mainly as teachers, focusing the majority of their time and scholarship on teaching and transmitting

knowledge in the classroom (Rudolph, 1990; Thelin, 2011). Even a professor's research had a pedagogical focus, as "the primary rationale for such scholarship was its impact on teaching" (Perkins, 1972, p. 683). A professor's main objective was teaching, and their research served as a form of development in this regard: the more a professor knew, the more – and perhaps better – they could teach. Professors prioritized teaching because that was what institutions needed from and expected of them. The relationship between a professor's teaching and their institution was not an overly complicated one because it was so clear for so long: colleges and universities existed to teach students and professors existed primarily to do the teaching.

How institutions in the United States prioritized teaching began to change in the late 19th century, catalyzed by the founding of Johns Hopkins University in 1876. By creating an institution that placed more focus and value on the research done by professors, Johns Hopkins University became America's first research university (Thelin, 2011). Change in higher education was expedited during World War I and II, when the "American government began to support research on a large scale" (Kline, 1977, p. 38) to compete with the innovations and advancements being made in other countries (that could be perceived as threats to the United States). American colleges and universities, responding to both a new political agenda and redirected federal funding, began to focus more of their time and attention on producing research, which then had an effect on how much time they prioritized for their teaching (Geiger, 1986). Where once institutions employed professors primarily as teachers who researched as a way to supplement and better their teaching, two World Wars helped change both a professor's work and how their institutions influenced the work they did. Professors focused more on research in response to the changing needs and demands of their institutions (Diamond, 1993; Huber, 2004), though the importance of their teaching did not change (especially to the students

4

paying tuition specifically to learn at these institutions from these professors).

In pressuring professors to change their priorities, institutions changed the relationship with their professors, too. Professors, once "a group of brilliant iconoclasts who need total freedom to pursue and instill knowledge" (Mellow, Woolis, Klages-Bombich, & Restler, 2015, p. 2), no longer had as much freedom as they previously did. A professor's "freedom" became limited in an environment full of responsibility and pressure to meet the needs of their institution (Gappa, Austin, & Trice, 2007). A professor's primary responsibility remained teaching, but both institutional and market demands expanded a professor's responsibilities beyond the classroom.

There are a lot of needs to be met colleges and universities, which can equate to a lot of responsibilities for an institution's professors. To this point, Hearn (1992) explained that:

> It is the instructional function of higher education, not the research and service missions, that most endears higher education to the public and there is no evidence that the public believes the benefits of college are independent of what is taught and learned there. (p. 21)

More specifically, research universities are inherently complex organizations because their academic missions include teaching, research, and service (Fairweather & Beach, 2002; Keohane, 1993). Research universities aspire to be many things to many people, tasked with balancing the value of their research with the importance of teaching their students. "Institutions of all types attend to their educational missions, but at a research university, the focus on good teaching feels countercultural" (Cook & Kaplan, 2011, p. 196) amidst an environment that may place is priorities, resources, and rewards elsewhere.

Yet, the value of teaching in higher education is evident, given "how much at an

5

institution depends on how well it is done" (Zajonc, Palmer, Scribner, & Nepo, 2013, p. 152), what students expect from higher education (Airwood, Grimm, Buchanan, Nease, & Michigan State University, 2016, p. xv; Caplan, 2018), and what institutions understand to be the "primary means through which they affect students" (Mayhew, et al., 2016, p. 592). However, what one (professor, student, or institution) says is important and what one does to further that importance is not always the same thing (Scott & Davis, 2007). Teaching may be a core part of the mission of most institutions, but its importance essentially becomes downplayed when a disproportionate emphasis is placed on conducting research and publishing (Fairweather, 1996; Schmidtlein & Berdahl, 2011). The type of institutional priority-setting and decision-making that devalues teaching comes at a cost, as there is a "significant institutional price to be paid, in terms of student development, for a very strong emphasis on research" (Astin, 1993, p. 338).

Some even blame the lack of attention on teaching as a major reason for deficiencies in student learning (Arum & Roksa, 2011). Students see attending college as "an investment in themselves" (Rossi, 2014), and, in turn, expect their professors and institutions to invest in them – and their learning – too. Students see a professor's "prime business" (Eliot, 1969) to be their learning, and may not be as interested in or as knowledgeable about what a professor does when not in the classroom teaching. Professors at research universities have responsibilities that extend far beyond the classroom, but a student sees their professor primarily as a teacher and may not necessarily know or care what they do outside of teaching.

**Problem Statement**

Professors at research universities are tasked with prioritizing their teaching and scholarship, but the importance of the former is sometimes muddied when institutions place a greater emphasis on the latter (via the tenure process, promotions, raises, and rewards). Given

their name, that a research university would emphasize its scholarship is not necessarily surprising, but doing so – at a potential cost to the teaching they provide – complicates the other responsibilities of universities. Namely, research universities have a clear duty to provide quality teaching (Tagg, 2003), but a professor's ability to fulfill that pedagogical responsibility can be challenging amongst environments and interactions that expect – and even reward – them to prioritize their research more. But making a professor's research more important does not necessarily make their teaching any less important, professors still have a responsibility (via the institution, their students, peers, and themselves) to their teaching, too. Professors are teacher-scholars, even if they do not always feel that way amidst the numerous individuals, environments, and interactions at a research university that may prioritize a professor's teaching differently. But within those individuals, environments, and interactions is also a lot of uncertainty about which influence a professor's teaching, the effects(s) they may have, and to what degree do they may have an impact? If the expectation is for professors at research universities to be teachers and scholars, then how do they still prioritize their teaching amongst individuals and in environments that may not always do the same?

## Research Questions

The intent of this study is to understand professors at a research university, and how the environments and individuals a professor interacts with influences them and their teaching. The primary research question for this study is, "How do professors at a research university understand and explain the factors that have influenced their teaching?" The secondary research question is intended to focus on the institutional factors that may have the most influence on a professor and their teaching: "What are the most influential factors that affect a professor's teaching at a research institution?"

**Conceptual Framework**

For this study, I will utilize Bronfenbrenner's (1979) bioecological model of human development to investigate how professors at a research university understand and explain the factors that have influenced their teaching. Bronfenbrenner (1979) defined human development as:

> The process through which the growing person acquires a more extended, differentiated, and valid conception of the ecological environment, and becomes motivated and able to engage in activities that reveal the properties of, sustain, or restructure that environment at levels of similar or greater complexity in form and content. (p. 27)

At the heart of this definition is the interactions between the individual and their environment, understanding how one's development is an evolving process of that interaction (Bronfenbrenner, 1993, p. 4), and how it produces "lasting change in the way in which a person perceives and deals with their environment" (Bronfenbrenner, 1979, p. 3).

The individual, often referred to as the "human organism" in the model, is "conceived as a functional whole, an integrated system in its own right in which various psychological processes – cognitive, affective, emotional, motivational, and social – operate not in isolation, but in coordinated interaction with each other" (Bronfenbrenner, 1993, p. 5). Bronfenbrenner's model is one predicated on interaction, with an individual conceptualized as embodying a series of interactions. The environment is defined in a similar manner, as a "system of nested, interdependent, dynamic structures ranging from the proximal, consisting of immediate face-to-face settings, to the most distal, comprising broader social contexts such as classes and cultures" (Bronfenbrenner, 1993, p. 4). The environment consists of what the individual interacts with and

how they are impacted by those interactions. The environment can be immediate spaces individuals find themselves in, but it can also be extended beyond that, to include more distant aspects of their surroundings (that still impact the individual).

Key to the model is that development occurs through organism-environment interaction (Bronfenbrenner, 1993), and it seeks to understand the complexities of both the organism and environment to then conceptualize development in a way that reflects those interactions and the change that occurs over time. The model is broken down into what Bronfenbrenner and Morris (2006) called the "four defining properties": 1. Process, 2. Person, 3. Context, and 4. Time that all influence and affect each other:

1. Process: "This construct encompasses particular forms of interactions between organism and environment, called proximal processes, that operate over time and are posited as the primary mechanisms producing human development" (Bronfenbrenner & Morris, 2006, p. 795).

   - *Examples*: How a professor's teaching may be affected during their time at a specific institution or how their experiences learning to teach at previous institutions have impacted their current teaching.

While development cannot occur without proximal processes, it is important to understand that such development must be reciprocal, may involve interactions with people, objects, and symbols, and may not always be positive (development can still be produced from negative interactions) (Bronfenbrenner & Morris, 2006). The model starts with process because it is one rooted in interaction, as further development cannot take place without engagement as an impetus.

2. <u>Person</u>: It is important to understand the "influence of individuals on their own development" (Bronfenbrenner, 1993, p. 27), as their "dispositions can set proximal processes in motion in a particular developmental domain and continue to sustain their orientation" (Bronfenbrenner & Morris, 2006, p. 795).

- *Examples*: How a professor without any formal training to teach feels about their abilities as a teacher or what motivates a professor to develop as a teacher.

The person is not only the individual, but also their "background and demographic characteristics, abilities, and preferred ways of interacting with the environment" (Renn & Reason, 2013, p. 124), as the "biological resources of ability, experience, knowledge, and skill are required for the effective functioning of proximal processes at a given stage of development (Bronfenbrenner & Morris, 2006, p. 796). People are complex, and how they act and interact is a product of numerous attributes from the past and present, that have the capacity to affect future interactions in a multitude of different ways. Bronfenbrenner (1993) called these "developmentally instigative characteristics" and defined them as "the attributes of the person most likely to shape the course of development, for better or for worse, are those that induce or inhibit dynamic dispositions toward the immediate environment" (p. 11). In essence, who an individual is, in many ways, will determine how they interact with the world around them.

3. <u>Context</u>: "The ecological model environment is conceived as a set of nested structures, each inside the other" (Bronfenbrenner, 1979, p. 3).

- *Examples*: How the Biology and English departments may value – and reward – a professor's teaching and research differently or how two separate

professors in the same department may place different values on their teaching

and research.
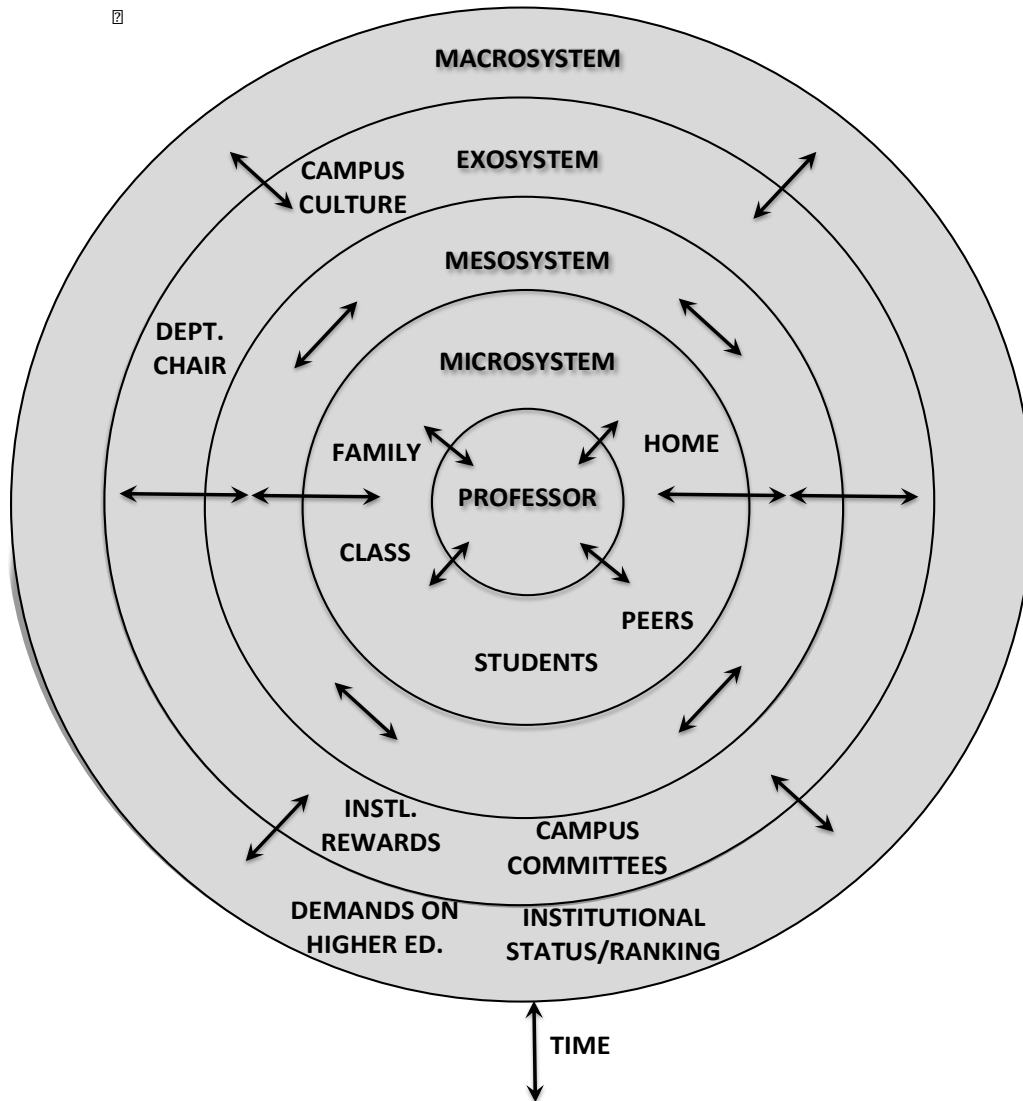


*Figure 1.* Bronfenbrenner's Bioecological Model of Human Development. Adapted from
"Bronfenbrenner's Ecological Theory of Development," by Hchokr, 2012, November 8.
Copyright 2012 Creative Commons.

The context (as represented in Figure 1) in Bronfenbrenner's model is comprised of multiple levels in which developmental encounters take place between the individual and their environment. The context includes a microsystem, mesosystem, exosystem, and macrosystem; all of which interact with each other over time (the chronosystem) and are interrelated to each other:

1. Microsystem: "A pattern of activities, roles, and interpersonal relations experienced by the developing person in a given face-to-face setting with particular physical, social, and symbolic features that invite, permit, or inhibit, engagement in sustained, progressively more complex interaction with, and activity in, the immediate environment (Bronfenbrenner, 1993, p. 15).

   - *Examples*: The professor interacting with a student while teaching a class, with another professor as they discuss research during a departmental meeting, or with a peer as they talk about pedagogy.

2. Mesosystem: "Comprised of the linkages and processes taking place between two or more settings containing the developing person. Special attention is focused on the synergistic effects created by the interaction of developmentally instigative or inhibitory features and processes present in each setting (Bronfenbrenner, 1993, p. 22). More simply, it is "a system of two or more microsystems" (Bronfenbrenner, 1993, p. 20).

   - *Examples*: How a professor may teach their class differently after a discussion with a peer about pedagogy or how their research agenda may be affected by decisions made in a departmental meeting.

12

3.  Exosystem: "Comprised of the linkages and processes taking place between two or more settings, at least one of which does not contain the developing person, but in which events occur that indirectly influence processes with the immediate setting in which the developing person lives" (Bronfenbrenner, 1993, p. 24).

    - *Examples*: How the content a professor is expected to teach in their class is determined by the curriculum set by an institutional committee they are not a part of or when a departmental push to generate more funding necessitates more time spent writing grants and impacts the time available for a professor to prepare for teaching class.

4.  Macrosystem: "Consisting of the overarching pattern of micro-, meso-, and exosystems characteristic of a given culture, subculture, or other extended social structure, with particular reference to the developmentally instigative belief systems, resources, hazards, lifestyles, opportunity structures, life course options, and patterns of social interchange that are embedded in such overarching systems" (Bronfenbrenner, 1993, p. 25).

    - *Examples*: How a change in organizational leadership may affect the institution's values toward and rewards for a professor's teaching or how a professor new to campus may view – and interact with – their surroundings differently than a professor that has been on campus for decades.

Understanding the different levels within an environment and the effects they may have is important to the model because "development is a function of forces emanating from multiple settings and from the relations among these settings" (Bronfenbrenner & Morris, 2006, p. 817). Again, as significant as a person's environment may be, it is the interactions that take place

within that environment that are paramount. In other words, the effects of proximal processes are more powerful than those of the environmental contexts in which they occur (Bronfenbrenner & Morris, 2006, p. 804).

4. Time (the chronosystem): To be effective, the activity must take place "on a fairly regular basis, over an extended period of time" (Bronfenbrenner & Morris, 2006, p. 798) and "the life course of individuals is embedded in and shaped by the historical times and events they experience over their lifetime" (Bronfenbrenner & Morris, 2006, p. 821).

- *Examples*: How a professor may approach their job differently during the tenure process (compared to once they were granted tenure) or how the birth of a child may change their schedule by keeping them home (and away from campus) more than they did before their child was born.

Lastly, it is important to understand that the bioecological model is an evolving theoretical system for the scientific study of human development over time (Bronfenbrenner, 2005). The concept of time within the framework can be applied in a number of different ways: it can refer to one's past experiences, when a specific interaction took place, or the interactional effects that may exist during one's lifetime (and beyond into future generations) (Bronfenbrenner, 1979; Bronfenbrenner & Morris, 2006). Development occurs throughout one's life leading up to an interaction, takes place as that interaction is occurring, and then continues beyond that interaction. As much as the model is predicated on those interactions, they are often affected greatly by what precedes and follows them, too. The model takes this into consideration by conceptualizing time more broadly and holistically, to fully understand development and its relationship with time.

Collectively, the four components of Bronfenbrenner's ecology model provide the framework for understanding human development and how an individual interacts with and is impacted by their environment. For purposes of this study, it will be used to better understand a professor's development as a teacher, and how their teaching is affected and influenced by the institution where they are currently working. Renn and Reason (2013) described Bronfenbrenner's model as being "useful in understanding how an individual's characteristics (person) mutually shape relationships (process) with people and objects in the environment (context) over time to promote or inhibit various developmental outcomes" (p. 124). Tierney (1988) noted how "people come to believe in their institution by the ways they interact and communicate with one another" (p. 16), and that is precisely what Bronfenbrenner's model seeks to understand.

Bronfenbrenner's model is an appropriate fit for my research as I seek to understand the factors (individuals, events, and environments) that influence a professor's teaching at a research university and the effects of these factors interacting with the professor (and with each other). Bronfenbrenner's model uses interactions as fulcrums for development, and so do colleges and universities. Interactions between students and faculty can affect student learning, motivation, and persistence toward graduation (Chickering & Gamson, 1987; Guskin, 1994: Kuh & Hu, 2001; Pascarella, Smart, & Ethington, 1986). Interactions among faculty can affect each other's teaching (Guskin, 1994), how their teaching is evaluated, and how the curriculum they teach is determined (Guskin, 1994; Kezar & Maxey, 2016; Lattuca & Stark, 2011). Bronfenbrenner (1993) presented development as "occurring through organism-environment interaction through the life course, manifested in the successive interplay between environmental stresses, personal initiatives, and environmental opportunities" (p. 30), so understanding the various interactions is

key to making sense of an individual may develop within that environment. The purpose of this study will be to focus on a professor's teaching and how a professor's teaching is affected by the various individuals and environments they interact with at an institution.

**Chapter Summary**

This study seeks to understand the individuals, environments, events, and interactions that have influenced a professor's teaching at a research university. Teaching is a core tenet of a research university's mission and it makes up a substantial portion of a professor's job (even when it may only make up half of their actual job description). Yet, despite the importance of a professor's teaching to a research university (and the emphasis placed on professors developing as teacher), there is uncertainty about how a professor's teaching is affected during their time at a research university. If a research university is reliant upon their professors to be quality teachers, then the importance of this study is in understanding how the quality of a professor's teaching is influenced during their time at the research university.

Bronfenbrenner's (1993) bioecological model fits this study because it positions "development as a function of forces emanating from multiple settings and from the relations among these settings" (Bronfenbrenner & Morris, 2006, p. 817). The bioecological model is about the individual, their environment, the interactions between the individual and their environment, and any changes that may take place (especially to the individual) over time. Using similar language, Shulman (1996) argued that "teaching is an extended process that unfolds over time" (p. 5), so this study will focus on understanding what that process looks like for professors and how their teaching develops over time. Specifically, this study will focus on the factors that influence a professor's teaching, and the possible effects of certain individuals, environments, events, and interactions. Using Bronfenbrenner's model to further understand how an individual

professor interacts with other individuals, their environments, and the effects of those interactions take place is a logical decision for the purposes of this study.

The next two chapters will serve as a continuation of the discussion about professors at research universities, and how their teaching can be affected by the individuals, environments, and events they interact with on a daily basis. Chapter two will be the literature review and it will use Bronfenbrenner's bioecological model to frame what has been written about professors teaching at research universities and how all three of those things (professors, the teaching they do, and the institutions where they teach) have changed over time. Chapter three will serve as a transition from what has been written in the past to what I want to write about the factors that influence and affect professors teaching at research universities. The third chapter will present my methods and methodology, and it will explain the process I will employ to a generate the answers to my research questions. Chapter four will be a presentation of my findings, and how the 15 professors I interviewed spoke about their teaching experiences, the expectations placed upon it (by MSU, their students, and themselves), and how they have developed as teachers over time. Chapter five will revisit and summarize the preceding chapters, with an emphasis on the study's major findings and responses to the two research questions. Additionally, the final chapter will provide a series of implications and recommendations for the research institutions, faculty developers, and faculty and their influence on a professor's teaching.

# CHAPTER TWO: LITERATURE REVIEW

## Introduction

This study asks how professors at a research university understand and explain the factors that have influenced their teaching. Bronfenbrenner's bioecological model of human development is used to conceptualize the "factors" (individuals, objects, and environments) as points of interaction and influence for professors and their teaching. Integral to understanding Bronfenbrenner's bioecological model of human development is recognizing how it is the interactions between the individual and their environment that, over time, affect and produce change in the individual (Bronfenbrenner, 1979, 1993). The intent of this literature review is to present the individuals, objects, and environments a professor is likely to encounter at a research university and emphasize how a professor's teaching is affected by their *interactions with* those individuals, objects, and environments.

## Professors as Teachers and Scholars

The teacher-scholar paradigm has historically been accepted as the ideal for the professor in American higher education (Crimmel, 1986). The goal is proficiency and productivity in both teaching and scholarship, without assuming that a weakness as a teacher or scholar can be overcome by an increased strength in the other. Espousing the teacher-scholar paradigm is not about relying on being a good researcher or a good teacher, but being good at both, in a way complementary to the different skillsets needed for each. According to Fairweather (2002), "the ultimate tenet about faculty work, which is influenced by beliefs about the importance of intrinsic motivation and the overlap of teaching and research, is that faculty members can be productive in all aspects of faculty work" (p. 29). That a professor *can* be a productive researcher and teacher is no guarantee that they actually *will* be successful in one or both.

The teacher-scholar paradigm exists at many colleges and universities because it reflects the values the institutions have traditionally espoused. According to Barr and Tagg (1995), "a college is an institution that exists to provide instruction and to produce learning" (p. 13), positioning teaching as the basis for a college or university's existence. An emphasis on teaching is not to belie the importance of research to higher education, but to emphasize the contributions of teaching and learning to the knowledge generated and disseminated by the institutions. Historically, "universities were found to both honor and protect this public good knowledge, and to give particular attention to its dissemination through teaching and to its augmentation through research" (Smith, 1978, p. 2). Here, teaching and scholarship are placed in an order where the former benefits the latter, and a professor uses their scholarship to improve as a teacher. Research is used as a tool to better teaching, thus improving the quality of knowledge a professor produces and provides to their students.

Literature suggests that teaching and researching are mutually reinforcing because of the implicit assumption that the best researchers are the best teachers (Bain, 2004; Cutten, 1958; Fairweather, 1996; Wieman, 2017). The implication here is that the more one knows about a subject, the more one should be able to then teach that subject. But the literature has shown a fallacy in such thinking (Boyer, 2016; Kline, 1977; Wieman, 2017), as "expertise in a field is not equal to or synonymous with the ability to use and share that expertise for the instruction of students" (Kezar & Maxey, 2016, p. 108). There is an inherent connection between being a teacher and scholar, but also an underlying separation, as how a professor becomes successful at teaching may not be related to their research achievements.

These conflicting views on the relationship between research and teaching, somewhat ironically, generated a lot of research. In the late 1970s, Friedrich and Michalak looked at the

cases of 74 professors at Franklin and Marshall College (a small liberal arts school in southeastern Pennsylvania, though the focus will turn specifically to research universities in the next section) and compared their research productivity and teaching effectiveness against variables (knowledgeability, organization, and time and effort) that may affect either/both. The researchers found "little or no relationship between how productive a person is as a researcher and how effective that person is as a teacher" (Friedrich & Michalak, 1983, p. 145) and concluded that "research does not have much of an impact on most of the factors that seem to contribute to effective teaching" (Friedrich & Michalak, 1983, p. 159). The teacher-scholar paradigm remained intact, with a professor's teaching and research framed as coexisting with each other (without necessarily affecting each other). Work done by Fox in 1992 corroborated these findings and reported, "research and teaching represent not a single dimension of academic investments, but, rather, different dimensions that are at some odds with each other" (p. 303). The wording here was crucial, as a professor's research and teaching were separated in a way that still acknowledged a relationship between the two, but broadened it to incorporate the multiple dimensions of a professor's responsibilities (beyond teaching and research) and their overall effects on one's time.

Additional research done by Figlio and Schapiro (2017) furthered this work by stating that top teachers are no more or less likely to be especially productive scholars than their less accomplished teaching peers. How one does as a researcher does not have a direct effect on their teaching, and vice versa. The importance of separating a professor's teaching and researching capacities echoes previous work done by Friedrich and Michalak in 1983, when they:

Denied the common complaint that there is not enough time to be a good

researcher and a good teacher; they indicate that it is possible to do good research

without detracting significantly from the time and attention devoted to teaching.

(p. 160)

Here, a professor's teaching and research are separated from each in other in a way that reframes them as neither competing or complementary, but just as different professional requirements that compete for time amongst their other responsibilities. Research and teaching are two of many components in a professor's job description and how one fares in either does not necessarily have a direct effect on the other.

There are a number of factors that can promote or prevent a professor's development as a teacher, including how they have been previously taught how to teach, the impact of the individuals (students, peers, and superiors) and environments (classrooms and conference rooms) they interact with, and how their institution values and rewards their teaching. It can be a complicated dynamic of the individual professor, the different environments they find themselves in, and the various interactions that take place between and within the two. Thus, there is a need to explain these various factors in order to better understand the potential they have to affect and influence a professor's teaching.

### The Research University, Home to the Scholar-Teacher

Research universities, given their titles, make their priorities very clear. These types of institutions are "pluralistic, multifaceted, and wondrously complex" (Keohane, 1993, p. 101) organizations. In other words, they are lot of things to a lot of people, and their complexities tend to be a product of trying to meet all the needs of all those people. As Fairweather and Beach (2002) noted, "research universities encompass the full range of academic missions – teaching, research, and service – but place a different emphasis on these missions" (p. 111). Broadly, Kezar and Maxey (2016) believed "learning is a core mission regardless of the type of

institution" (p. 205). But the literature has shown how a disproportionate emphasis on conducting research and publishing has essentially downplayed the importance of teaching (which is key to fulfilling the mission of learning) at research universities (Fairweather, 1996). At research universities, a professor's research and teaching both matter, but it is their research that tends to matter more than their teaching.

At a research university, the teacher-scholar paradigm tends to be reordered and reframed, turning professors into scholar-teachers instead. They are, after all, research universities. There is importance and nobility to teaching (Palmer, 1998; Rose, 2014), but the emphasis an institution places on it is not as great as the one placed on research. Research universities tend to prioritize and reward research (Gumport, Iannozzi, Shaman & Zemsky, 1997) because of its benefits to the university. From an institution's perspective, the "presumption of a benefit to teaching from research activity permits heavy emphasis by faculty and administrators on the importance of research" (Fairweather, 1996, p. 111). Again, this belief is rooted in the assumed benefits of a professor's research on their teaching. Such perspective and values are also reflective of an environment where "good teaching is assumed, not rewarded" (Boyer, 2016, p. 82). At a research university, professors are treated as scholars who also teach, where their capacity to produce knowledge is expected and their ability to teach knowledge is implied.

However, a focus on a professor's research does not equate to an institution's complete disregard for the teaching done by their professors. Friedrich and Michalak (1983) advised that "care should be taken to see that involvement in research does not interfere with the instructor's responsibility to maintain a high level of knowledgeability in the areas in which he or she teaches" (p. 160). The suggestion here is for institutions to position a professor's research and

teaching so they that interact positively in a way that does not negatively affect the other, as both have great value to a research university. Inherently, all institutions value quality teaching (Beach, Sorcinelli, Austin, & Rivard, 2016; Bowen & McPherson, 2016; Mayhew, et al., 2016), and a research university's emphasis on a professor's research does not equate to a disregard for their teaching.

## How a Professor Learns to Be a Teacher

In order to better understand how a professor learns how to teach, there is value in investigating how professors are generally taught how to teach and how their views on teaching may develop over time. According to Horn (2010), "understanding how teachers come to know what they know is a complex and multifaceted endeavor" (p. 227). Historically, colleges and universities believed that professors could translate the content they knew into content they could teach because of the knowledge the professors brought to the classroom (Boyer, 2016; Kline, 1977; Wieman, 2017). That a professor knew their content was reflected in the degrees that had been conferred upon them. That a professor knew how to teach their content was where the complexity was introduced, as teaching required knowing more than one's subject. As Smith (1995) pointed out, "there is more to teaching than simply knowing the subject and talking about it...that's the easy part" (p. 20). The hard part, then, was the "time, practice, devotion, and sound principles" (Polya, 1957, p. 1) one must commit to in order to make the transition from being able to talk about information to being able to teach it.

The transition from scholar to scholar-teacher can be a complicated one for professors. Prior to entering the classroom as teachers, a professor may not be prepared to teach. Few were sufficiently trained or prepared to do so (Ambrose, 2010; Astin, 2016; Bowen & McPherson, 2016; Hacker & Dreifus, 2011; Hativa, 2000a; Hativa, Barak, & Simhi, 2001; Smith, 1995;

23

Stenberg, 2005). This lack of preparation traces back to their graduate programs, where the professors may not have been encouraged to focus on – or even think about – teaching before they became faculty members (Beach, et al., 2016; Kezar & Maxey, 2014; Nyquist, et al., 1999).

As PhD students, the focus was on becoming academic scholars. Future professors developed their skills in researching, writing, and publishing (Astin, 2016; Shulman, 2004; Stenberg, 2005), and may not have received explicit instruction about becoming instructors. When Arum and Roksa (2011) observed that "graduate training neither prepares students to teach nor always instills in them a respect for the importance of teaching" (p. 134), the initial point about lack of teacher preparation is justified by the second point's implication that learning to teach is not as important or as valued (by their institution) as learning to research, write, or publish. The future professors exited their graduate programs as "thoughtful researchers" (Beyer, Taylor, & Gillmore, 2013, p. 4), but may not have entered their new classrooms with the same level of preparation to teach. "Most faculty come to the classroom with no training for teaching beyond expertise in the discipline" (Smith, 1995, p. 22) with the hope that the time they have spent as a student, becoming knowledgeable in their field, will translate into being an effective teacher.

Even if a professor was not explicitly taught how to teach in graduate school, they have been surrounded by teachers their entire academic careers. Hopefully, through observation and interaction, they learned some teaching skills along the way (Hativa, 1997; Shadiow, 2013) to their PhD. The informality of a professor's learning how to teach does not absolve the lack of formal training, but does reframe the arenas through which a professor may have acquired knowledge about how to teach. Such knowledge acquisition also complicates the perception that "it is a bit shocking that so many college faculty are let loose on undergraduates with practically

24

no training in the work of teaching" (Bowen & McPherson, 2016, p. 126) because it presumes

that the only way to make a successful transition into teaching is through training.

## How a Professor Develops as a Teacher

Despite little preparation in graduate schools, faculty do in fact develop as teachers

through a combination of experiential learning, peer-to-peer interactions, and institutional

training and support. Perhaps the most common way for a college or university attempt to affect

the teaching their professors do is through faculty development training sessions. As professors

continue learning how to teach (Ambrose, 2010), institutions are tasked with providing the type

of professional development that will support professors and help them become better teachers.

Kezar and Maxey (2016) referred to such skills as "specific practices and considerations" (p.

108). Wieman (2017) expounded here and wrote that professors would have to know "how the

content and skills are best learned, what common student difficulties are and how to overcome

those, and how best to motivate students to learn eagerly and effectively" (p. 12). These are skills

that can be learned through a combination of the (aforementioned) professional development

opportunities found at an institution and the experiential learning found in a classroom.

These professional development opportunities tend to cater to one of two populations on

a campus: those feeling punished to do better and those already doing well. For those feeling

punished, faculty development entails "activities designed to improve their performance"

(Nelsen, 1981, p. 9). Many professors perceive their participation in them to be an "indication of

their shortcoming that require attention and active correction" (Condon, et al., 2015, p.1) and that

such top-down approaches ignore their existing knowledge and expertise (Henderson & Dancy,

2008). For professors doing well, such professional development activities can be redundant or

unnecessary. The professors who are committed to improving their teaching likely already use

successful pedagogies and may not benefit from further development (Fairweather, 2008). By exclusively developing a professor's teaching through training sessions, institutions may be trying to solve the right problem in the wrong way.

More training about teaching may not be what a professor needs from an institution in order to become a better teacher. Instead, they may benefit more from institutional support of their current teaching. As Hativa, Barak, and Simhi (2001) explained, "university professors, not having received any systematic preparation for their teaching role, gain beliefs and knowledge about good pedagogy through trial-and-error in their work, reflection on student feedback, and by using self-evaluation" (p. 700). Or, as Williams (2017) reflected, "I really think the best way to learn to teach is by doing it" (p. 20). Schon (1983) referred to this as "knowing-in-action" because "it seems right to say that our knowing is in our action" (p. 43). Professors may gather information about teaching from other resources (peers, professional development, or publications), but learn about their teaching through time in their classroom. How a professor learns to teach (and then develops as a teacher), therefore, is an experiential product of their teaching (Fairweather, 1986).

Rather than train faculty on teaching, institutions may be better served providing individual support to professors as develop as teachers over time. Many professors consider their careers as teachers a process (Shadiow, 2013) and how their teaching develops can be a product of the time they spend trying to understand how to improve it. Much has been written about the role of self-reflection in teaching (Berg & Seeber, 2016; Brookfield, 1995; Finkel, 2000; Schon, 1983, 1987; Van Manen, 1991) and the importance for teachers to generate meaning through both experience and reflection on those experiences (Dewey, 1952). More beneficial to a professor – and crucial to their development as a teacher – may be their institution's ability to

encourage this type of reflection and then tending to the individual needs produced through reflection. If many professors are, in fact, motivated by "the sense of accomplishment of a job well done" (Hativa, 1995, p. 405), then it would behoove an institution to understand how well their professors think they are doing as teachers. Faculty development can only be a "key lever for change in higher education institutions" (Beach, et al., 2016, p. 145) when the institutions work with their professors to support their teaching.

### How a Professor Learns their Surroundings

At the same time a professor is developing as a teacher, they are also learning what it means to teach at their specific institution. Even though an individual's understanding of the faculty career began with the graduate school experience (or possibly even earlier in their academic careers) (Austin, 2002; Bess, 1978), what a graduate student thought – or is taught – what it will be like as a professor is not always the same as actually being one. Learning about teaching is not the same as learning to teach. Socialization is a process predicated on interaction, and how an individual professor interacts with others (professors, administrators, and students) in their environments, the environments themselves (classrooms, meetings, and individual interactions), and how those interactions occur, are processed, and affect future interactions (Tierney, 1988). Even if the understanding of the teaching process began in graduate school, the process of being socialized as a teacher (and, therefore, learning how to teach) cannot begin before a professor enters the environment and begins teaching.

When one begins as a professor on a college campus, they enter into an environment where they are expected to play many roles: teacher, adviser, researcher, university citizen, and departmental colleague (not necessarily in that order). Professors hired primarily to teach are expected to "spend over two-thirds of their time in instruction, with the rest of their time split

27

between administrative tasks and research" (Kezar & Maxey, 2016, p. 6). In this case, the teacher-scholar paradigm is expanded to include more than just those two responsibilities. However, at a research university, professors are primarily teachers and researchers, with a little time left for anything else (service, outreach, and governance).

In addition to their teaching load, professors also have a "plethora of roles and the existence of numerous factions demanding attention produce a multifaceted complex of strains on individuals in the academic role" (Gmelch, Wilke, & Lovrich, 1986, p. 267). These institutional complexities manifest themselves as complicating how a professor can and should navigate, prioritize, and fulfill their responsibilities. Research universities are complicated organizations (Keohane, 1993), so a professor is forced to figure out how best to accomplish what is required of them within an environment that may be equally as complex. This multitude of responsibilities often complicates a professor's teaching (Association of Governing Boards, 2013; Astin, 1993; Fairweather, 1996; Schmidtlein & Berdahl, 2011) by focusing their time, attention, and energy in many different places beyond their classroom. Jencks and Reisman (1968) posited that academics have only a limited amount of time and energy, and they know that in terms of professional standing and personal advancement it makes more sense to throw this into research than teaching. Ultimately, it is up to a professor how they want to spend their time, because – or even in spite – of the surroundings influences they may have attempting to choose for them.

## The Benefits of a Professor's Teaching

Sometimes lost in the conversation about a professor's teaching and who may affect it, is who may benefit from it, too. Overlooking the benefits of a professor's teaching is understandable at research universities, where "the focus on good teaching can feel

countercultural" (Cook & Kaplan, 2011, p. 196) within an institution that places such a high priority on the research its professors produce. But this perspective may not be one shared by everyone at an institution, especially by the professors responsible for the teaching.

Many professors value their teaching and enjoy their role as a classroom teacher. This aspect of a professor's job provides them the ability to interact with and affect their students (Arum & Roksa, 2011; Banner & Cannon, 1997; Carey, 2016; Tagg, 2003) differently from their research. Teaching is a different form of scholarship than research. Teaching is similar in that it requires time and patience to develop (Kezar & Maxey, 20616; McKeachie, 2002), but different in that it relies on interactions and relationships (in concert with knowledge) in order to be effective. No wonder "most college faculty are invested in teaching and many engage fully, taking pride and care in their practice" (Mellow, Woolis, Klages-Bombich, & Restler, 2015, p. 1), as they understand how much work goes into being an effective teacher.

In addition to the complexities of teaching, it is also full of potential benefits (Ambrose, 2010; Guskin, 1994; Rose, 2014) to the individual professors. Teaching, among other things, can produce a sense of accomplishment. In fact, many "teachers teach because it gives them the deepest sort of satisfaction" (Banner & Cannon, 1997, p. 121). Recent research by Grove (2017) reiterated the intrinsic value of teaching, as:

> Nearly nine out of 10 academics said that teaching was a source of satisfaction to
> them, just six percent claimed that they were unhappy about having to educate
> students, and 29 percent said they found teaching more rewarding than research.
> (p. 36)

Regardless the value their institution may place on their teaching, professors tend to know its importance, value, and impact (on their students, and especially on themselves) of the teaching

they do on a college campus. Professors understand how "education is a vital, demanding, and precious undertaking, and much depends on how well it is done" (Zajonc, Palmer, Scribner, & Nepo, 2013, p. 152) by them in the classroom. Eliot (1969) once referred to teaching as the "prime business" of professors because of its inextricable relationship to the learning that should be taking place. Without that learning, it is fair to question what exactly the business of higher education would otherwise look like.

### The Institutional Values and Rewards of a Professor's Research and Teaching

A research university may not be conflicted about where it places its values, but a professor may wonder how much to value their teaching in an environment that may value it very little. Professors may feel they were hired to be both a teacher and a scholar, but are only being rewarded for doing one of those two things (Fox, 1992). How an institution values a professor's work can be reflected in how an institution rewards a professor for the work they do (through the hiring process, tenure and promotion decisions, salary increases, and awards). Fairweather (2008) encouraged professors to "take their cues about what their institutions value by looking at salary and promotion and tenure decisions rather than the rhetoric about or evidence in support of good teaching" (p. 24). Dintersmith (2018) was more succinct, acknowledging that "budgets reveal organizational values" (p. 77). The key is focusing on the values an institution enacts (through rewards) rather than the ones they espouse (in their mission or rhetoric).

What an institution values can be reflected in what it rewards, determining the degree to which it actually values the teaching and research done by its professors. According to Hativa (1997), "research and teaching are the most important tasks of the research university professor" (p. 2). Again, the argument is not to place research or teaching above or against the other, but to

remind that a professor's responsibilities are to both and to encourage them to place their research and teaching on an equal plane. But complications may arise when how a professor prioritizes their work does not align with how their institution does. At a research university, priority is placed on a professor's ability to produce research, and that capacity is likely a main reason they were hired by the institution in the first place (Fairweather, 1997). Such a prioritization has financial implications for the institution, as a professor's research can "bring additional revenue into the institutions and provides highly visible justification for government expenditures on basic research at universities" (Wieman, 2017, p. 8). A priority is placed on hiring professors who can generate money and attention through their research. Understandably, a "premium is placed on faculty whose research can be brought to the commercial market" (Association of Governing Boards, 2013, p. 26) because of the value of an additional revenue stream for an institution.

However, such a focus on profits can come at a cost to the other responsibilities research universities have, like ensuring their students are taught by professors who are as proficient in teaching as they are in research. Bowen and McPherson (2016) blamed the individual institutions, criticizing the hiring of inexperienced teachers and encouraging institutions to prepare instructors to a high standard for the demanding and important work of teaching. Within the structure of the scholar-teacher paradigm, a research university may sacrifice the quality of a professor's teaching ability if the institution only focuses on the quantity of its instructors' research output. Research and teaching have their values measured in different ways (Alpert, 1985; Tagg, 2003), but an institution makes clear its priorities when it essentially places less value on a professor's teaching by placing more of it on their research (Astin, 1993; Chalmers, 2011; Graff, 2003; Schmidtlein & Berdahl, 2011).

31

Recent research showed how academics appear to be as passionate about teaching as they are about their own research (Grove, 2017), even if their institutions did not treat – or reward – those two aspects of a professor's job equally. So, when Fox (1992) said that research findings "point to a strain between research and teaching" (p. 301), it is important to understand the tension that can be created when an institution expects a professor to prioritize both their teaching and research, but rewards each of those responsibilities differently.

To help institutions clarify the values placed on teaching and researching, Boyer (2016) suggested colleges and universities develop a system of faculty recognition that related to what the individual institution was seeking to accomplish. Simply, the university's rewards would reflect its values and the professors would be compensated in relation to the achievement of those values. Such an institutional individualization and autonomy would help avoid a "unitary mindset" (Tierney, 1988, p. 15) amongst all colleges and universities, allowing similar universities to function in different ways. A likely byproduct of a change like this would be the further exacerbation of the variation between – and within – institutions of higher education (Fairweather & Beach, 2002), but perhaps formalizing these differences is overdue anyway.

Research universities, though alike in Carnegie classification, cannot all function in identical ways because of their inherent differences. Research universities perform differently because "it is not possible (or educationally sound) for all departments in an institution to look exactly the same, teach students in the same ways, or have the same mix of teaching, research, and service" (Fairweather & Beach, 2002, p. 114). Similar differences also arise in disciplines, classrooms, meeting rooms, or anywhere else where different people (professors, peers, administrators, and students) may interact with other; and those differences are likely to produce different results in how a professor's teaching and research are regarded, reviewed, and rewarded

(Chalmers, 2011; Graff, 2003). From an institutional perspective, ecological differences are unavoidable, given the sheer number of individuals, environments, and interactions on a campus (Hacker & Dreifus, 2011). Everyone at a research university does not engage and interact with each other or the institution the same way (Birnbaum, 1988; Morgan, 2006; Scott & Davis, 2007). Thus, the differences in the needs of everyone and everything at an institution must be met in different ways by the institution (Bastedo, 2012). Inherently, how that happens is going to differ by individual, their past experiences, what they need in their current experience, and the degree to which their current institution is capable of meeting those individual needs.

## Broadening the Definition of Scholarship

In 1990, Boyer published *Scholarship Reconsidered*, which asked for teaching to be considered a form of scholarship and served as a clarion call for colleges, universities, faculty, and administrators, to consider teaching to be as rigorous – and important – as researching. Boyer's (2016) argument revolved around the belief that "knowledge is acquired through research, through synthesis, through practice, and through teaching" (p. 75). "Scholarship" was not only the information a professor gathered through the acquisition of knowledge, but also a deeper understanding of how that knowledge was acquired, and how it may be taught. Teaching was positioned as an integral part to a larger process, and the product of scholarship as "discovery, integration, and application" (Boyer, 2016, p. 76). Kezar and Maxey (2016) added to the definition:

> Scholarship could be defined more broadly as gaining expertise in how people
> learn and the best ways to teach or expertise in working with community groups
> to solve complex problems, in addition to the traditional form of expertise related
> to conducting a particular type of research. (p. 51)

33

The intent was to broaden the definition of teaching in a way that made it more reflective of the energy and effort necessary for success as a teacher. Boyer advocated scholarship to include more than research, writing, and publishing, and to give the same regard to class preparation, lesson-planning, and classroom facilitation. Boyer (2016) believed that "all forms of scholarship require a broad intellectual foundation" (p. 109) and argued that the same type of rigor required to be a successful researcher was also required to be a successful teacher. Reframing how scholarship was understood and applied within higher education was an attempt by Boyer to reinforce the similarities between a professor's research and teaching.

As important as it may be to want to broaden a definition to better reflect the academic challenges in everything a professor does, it is also important to understand who actually has the power to make such change. There may be more than one way for a professor to be a scholar at an institution (Gonzalez & Terosky, 2014), but it is often up to the institution to determine (through things like trainings and rewards) what they want scholarship to look like. Kezar and Maxey (2016) echoed Boyer's call to broaden the definition of scholarship to include more than just a professor's research, but they also understand that:

> The established view of scholarship has been richly productive and needs to be
>
> built upon, but it is rooted in an organizational context that is restrictively elitist,
>
> hierarchical, top-down – anchored in a reward system and protocols that are no
>
> longer viable. (188)

Where Boyer asked for scholarship to be "reconsidered," it is fair to question if that was enough to alter the perception of teaching's rigor in higher education. As O'Meara (2006) critiqued, Boyer's desire to reconsider scholarship is "one lever for change, but not a panacea for the problem" (p. 91). Wanting institutional change and seeing it happen are often two very different

things, as actual change tends to be a product of more than just an individual desire to reframe and rethink one's responsibilities and contributions. To change an institution typically takes more than just one person. Boyer continued a conversation about teaching using the type of language regularly used for research; however, encouraging the scholarship of teaching to be reconsidered does not mean colleges or universities will actually do so on their campuses. For a professor at a research university, how their scholarship is defined is unlikely to change until their institution decides to do so.

## Chapter Summary

Ultimately, the literature shows a complicated relationship between a professor's teaching, research, other institutional responsibilities, previous experiences, and the different environments they may find themselves. Individually, each of these elements is complicated enough, affecting a professor – and their teaching – in different ways and for different reasons. In some cases, these things can certainly be "different dimensions that are odds with each other" (Fox, 1992, p. 301), as evidenced by how a research university tends to prioritize and reward a professor's research more than their teaching. But simply because there may be differences amongst a professor's responsibilities does not mean they all produce tension or negativity. It is within – and because of – these interactions that a professor's teaching develops over time at an institution. A professor's teaching is affected by the values and rewards structure at an institution, by their interactions with students in the classroom, and through self-reflection over time. To equate difference with decline is to devalue the potential developments that may arise from the interactions a professor is likely to have on a regular basis.

A professor's teaching has the capacity to be influenced – both positively and negatively – by these different elements; and for as much as the literature reveals about these relationships

and interactions, there is still more to be uncovered. The purpose of this study will be to determine the influences on a professor's teaching. This study is meant to reveal the relationship a professor feels with their teaching, and how the individual professors, their teaching, and their relationship with their teaching are affected during their time at a specific institution. Much of the literature focuses on how this can happen, or how it has happened in the past, but there is a need to understand the experiences of individual professors working at a single research university and how their teaching is affected during that time at that institution.

The intent of this work will be to focus on how the professors interact with and are affected by their environment, and to understand the effect those interaction then have on a professor's teaching. If "good teaching is the primary means through which institutions affect students" (Mayhew, et al., 2016, p. 592), then there is at least an equal importance to be placed on how those same institutions then affect the professors doing that teaching. Thus, the study I propose will address professors teaching at a research university and how they understand and explain the individual, environmental, and institutional factors that have influenced their teaching.

**CHAPTER THREE: METHODS AND METHODOLOGY**

**Introduction**

In my study, I sought to understand how professors at a research university understood and explained the factors that influenced their teaching. I used a constructivist paradigm, which "assumes that reality is socially constructed" (Merriam & Tisdell, 2016, p. 9) as the framework for the study design. As a qualitative researcher, I am "interested in understanding how people interpret their experiences, how they construct their worlds, and what meaning they attribute to their experiences" (Merriam & Tisdell, 2016, p. 5). I know that "meaning is not discovered, but constructed" (Crotty, 1998, p. 9) and I did not want to construct my understanding of the professors' experiences teaching at MSU. Rather, I wanted to construct my understanding of the professors' understanding of their experiences teaching at MSU.

**Research Design**

I wanted to focus on the impact of a single institution on a professor's understanding and explanation of their teaching experience, and to better understand the environmental, interpersonal, and intrapersonal factors that have interacted to influence their teaching. I investigated how professors at one institution (MSU) understood similar factors (graduate school preparation, previous teaching experiences, professional development opportunities, awards, and rewards structures) and explained how those factors have impacted professors in different ways. Ostensibly, professors are all doing the same jobs at the same institution, but that does not mean they will have the same experiences and interactions in similar environments. As Bronfenbrenner (1993) explained, there is the "possibility that the same process may operate differently in different environments and any differing effects of the process will vary as a function of the human beings involved" (p. 19). The research university was the same, but that did not mean all

of their experiences were the same, too. Lattuca and Stark (2009) explained how individuals can be affected by influences "that operate at the institutional level and those that are specific to a particular unit" (p. 66). The differences within the institution allowed for differences in teaching experiences, which then revealed how professors teaching at the same institution did not all have the same experience.

The focus of my study was on the influences on a professor's teaching. Bronfenbrenner and Morris (2006) wrote that "development is defined as the phenomenon of continuity and change in the biophysical characteristics of human beings, both as individuals and as groups" (p. 793). My research revolved around interviewing 15 award-winning professors all teaching at the same university to generate a better understanding of their understanding of how a professor's teaching is influenced by their environment, their interactions with and within it, and the affecting relationships produced by those interactions (Lattuca & Stark, 2011). The intent was to capture the understandings of individual experiences of the professors teaching at a research university. A professor's teaching development has been framed as "continuity and change," and not relegated to betterment and improvement. Change can be negative, too. This study was designed to allow professors to describe how they understood and explained the positive and negative influences of a professor's positive and negative experiences as teachers at a research university.

## Research Questions

The intent of this study was to understand professors at a research university, and how the environments and individuals a professor interacted with influenced them and their teaching. The primary research question for this study was, "How do professors at a research university understand and explain the factors that have influenced their teaching?" The secondary research

question was intended to focus on the institutional factors that may have the most influence on a professor and their teaching: "What are the most influential factors that affect a professor's teaching at a research institution?"

## Setting

I conducted my research at a single institution, Michigan State University (MSU). MSU is a campus of approximately 50,000 students, with over 39,000 of them being undergraduates. As an institution, MSU is comprised of 17 separate "degree-granting colleges." The university employs over 4,400 (3,800 full-time and 600 part-time) faculty members.  Carnegie gives MSU their classification of "R1 – Doctoral University with the highest research activity," meaning MSU produces research and doctoral degrees at a preeminent level. MSU's priorities are reflected in a mission statement that reads (Michigan State University, 2018):

> *As a public, research-intensive, land-grant university funded in part by the state of Michigan, our mission is to advance knowledge and transform lives by:*
>
> - *providing outstanding undergraduate, graduate, and professional education to promising, qualified students in order to prepare them to contribute fully to society as globally engaged citizen leaders.*
>
> - *conducting research of the highest caliber that seeks to answer questions and create solutions in order to expand human understanding and make a positive difference, both locally and globally.*
>
> - *advancing outreach, engagement, and economic development activities that are innovative, research-driven, and lead to a better quality of life for individuals and communities, at home and around the world.*

Though it is conspicuously absent from the mission itself, MSU implicitly prioritizes the

importance of teaching with language like "advancing knowledge" and "providing outstanding education." For faculty and staff looking to develop their teaching (beyond the New Faculty Orientation everyone is supposed to attend before their first semester), MSU directs everyone to their Academic Advancement Network (AAN). The AAN "works with all faculty, academic staff, and academic administrators at Michigan State University as they join the university, establish professional trajectories, and move through various stages of review, promotion, and growth." The AAN offers a series events, programs, workshops, and resources to assist professors in developing their teaching. At the same time, MSU offers almost a dozen "programs, awards, and events to recognize outstanding faculty and academic staff" for their teaching. MSU presents itself as an institution that prioritizes educating students and rewarding teaching, but does not make explicitly clear how it prepares its professors to teach (beyond the resources available through the AAN).

Given the human ecology framework I employed, using a single institution allowed me to understand and explain the different experiences of different professors all teaching at the same university. Bronfenbrenner and Morris (2016) wrote about "the powerful effect of work environments on intellectual development" (p. 815), which is at the heart of this study. How the professors understood and explained their teaching experiences at MSU, their interactions with and within the various environments on-campus (and even online), and were influenced by the institution were crucial to answering my research questions. Furthermore, utilizing a single university allowed me to acknowledge the variance that can exist amongst different environments (colleges, departments, and classrooms) within the same institution, and encouraged respondents to speak about their various – and differing – experiences at MSU. Bronfenbrenner (1993) predicted "developmental processes are likely to differ significantly from

40

one macrosystem to the next" (p. 25), hence the focus on a single institution and an emphasis on understanding the developmental processes specific to it.

The institution played a crucial role in this study, as investigating it (its overall and departmental environments, interactions, and impacts) helped reveal its influences on the professors and their teaching. Bronfenbrenner (1993) called for "research designs that are commensurate with the complexities of human beings functioning in human situations" (p. 6). By focusing on multiple experiences at a single institution, my study provided a better understanding of the "situations" professors find themselves in that may influence their teaching: how its professors navigated their various responsibilities, how they interacted with their environments, and how the structures in place influenced their teaching. Investigating how professors at a research university understood and explained the factors that have influenced their teaching provided a more complete understanding of a professor's experiences as a teacher at MSU, how their teaching has developed over time, the influences that do – and do not – affect their teaching, and the choices they have made over their time at MSU.

## Participants

My study used purposeful sampling because I wanted to "discover, understand, and gain insight" (Merriam & Tisdell, 2016, p. 96) about the 15 professors and the factors that have influenced their experiences teaching at MSU. Given my research questions, I sought out professors – and their accompanying experiences and stories – who were "information-rich cases, from which one can learn a great deal about issues of central importance to the purpose of the inquiry" (Patton, 2015, p. 53). The goal of my purposeful sampling was to select a sample "from which the most can be learned" (Merriam & Tisdell, 2016, p. 96) and this was accomplished by using specific criteria for the 15 professors I chose to interview.

My purposeful sampling had a specific criterion that "directly reflected the purpose of the study and guided in the identification of information-rich cases" (Merriam & Tisdell, 2016, p, 97). I did not just want to interview any MSU professor about their teaching experiences, but rather ones with certain backgrounds and experiences that contributed to their ability to speak to their time teaching (both in depth and breadth). If the "logic and power of qualitative purposeful sampling derives from the emphasis on in-depth understanding of specific cases" (Patton, 2015, p. 52), then I believe that was accomplished through my approach in this study.

**Participant Selection**

My criteria for a professor's participation in my research study included:

1. **MSU professors who have been awarded the Teacher-Scholar Award in the past ten years.**

    a. Teacher–Scholar Awards are made to six members of the tenure system faculty from the ranks of assistant professor and associate professor who early in their careers have earned the respect of students and colleagues for their devotion to and skill in teaching. The essential purpose of the award is to provide recognition to the best teachers who have served at MSU for seven years or less.

        i. Per the Faculty Handbook (Michigan State University, 2018), "The essential purpose of the award is to provide recognition to the best teachers who have served at MSU for seven years or less, taking into consideration that the most effective teachers will have their instruction intricately linked to and informed by their research and creative activities."

b. By interviewing professors who have won the Teacher-Scholar Award, it narrowed the selection pool and acknowledged professors that have been awarded by MSU for their particular interests in – and focus – on teaching, its scholarship, and its classroom applications and practice. Selecting Teacher-Scholar Award winners also allowed the professors to all talk about how the same award has impacted their teaching (if at all).

c. The focus on Teacher-Scholar Award winners from the past ten years was a practical one, as I wanted to ensure that my criteria accommodated for career changes that no longer involved teaching at MSU (like moving into an exclusively administrative role, taking a position at another institution, or retiring).

  i. While going back further in time may have expanded the pool, I was not confident it would have increased the number of participants that met my selection criteria.

2. **Professors teaching at least one course per academic year.**

a. In a study about teaching, I wanted professors who were teaching at least one course in the 2018 – 2019 academic year in order to speak about their current experiences and to be able to compare them to their previous teaching experiences, too.

b. The course they were teaching in the 2018 – 2019 academic year could be in person or online, and could have taken place in either the fall 2018, spring 2019, or summer semesters 2019.

3. **Professors of diverse backgrounds**

a. Bronfenbrenner's bioecological model provides "three types of 'person' characteristics that are distinguished as most influential in shaping the course of future development through their capacity to affect the direction and power:

   1. Dispositions

   2. Resources (ability, experience, knowledge, and skill)

   3. Demand (which invites or discourages environmental reactions)" (Bronfenbrenner & Morris, 2006, p. 795-6).

      i. Given the number of personal characteristics with the capacity to influence an individual's development, a diverse pool of MSU professors was chosen in order to represent the different characteristics present in the model.

b. Professors of various sexes, races, and genders were included, so as to best represent as many of the experiences of MSU professors as possible in my study.

c. Professional backgrounds varied as well, so I included a mix of professors teaching in the arts and the sciences.

4. **Teaching primarily undergraduate students.**

a. This was more of a preference than a requirement, as the size of the interview pool I chose from dictated the amount of my criteria I was able to apply. But, focusing on undergraduate students was intended to avoid the differences in how teaching undergraduate and graduate students influence a professor's experience at MSU.

**Participant Overview**

I purposefully selected a total of 15 professors to participate in my study from an initial

pool of 58 professors whom had won MSU Teacher-Scholar Award between 2007 and 2018. Of

the 58 professors I emailed, 37 responded to my interview request (though not all of them were

willing to participate or met my selection criteria). The 15 participants represented a range of

genders, racial identities, academic fields, tenure status, previous faculty experience, and years of

teaching experience at MSU. Pseudonyms were used and limited demographic and professional

information was collected for confidentiality purposes. An overview of participant demographics

is in Figure 2.

*Table 1. Research Study Participants*

|  | Gender | Race | Field | Tenured | Years @ MSU | Previous Faculty |
|---|---|---|---|---|---|---|
| **Dr. Armstrong** | Male | White | Arts | Yes | >10 | No |
| **Dr. Brand** | Male | Person of Color | Arts | Yes | <10 | No |
| **Dr. Camden** | Male | White | Arts | Yes | >10 | No |
| **Dr. Dalton** | Male | White | Sciences | Yes | >10 | No |
| **Dr. Edison** | Male | White | Arts | Yes | >10 | No |
| **Dr. Foss** | Female | White | Arts | Yes | <10 | No |
| **Dr. Gordon** | Male | Person of Color | Arts | Yes | >10 | No |
| **Dr. Houston** | Female | White | Arts | Yes | >10 | Yes |
| **Dr. Isaac** | Male | White | Arts | Yes | <10 | No |
| **Dr. Jacobs** | Female | White | Sciences | No | <10 | Yes |
| **Dr. Kotz** | Male | Person of Color | Arts | No | <10 | No |
| **Dr. Lawrence** | Male | Person of Color | Sciences | Yes | <10 | No |
| **Dr. Matthews** | Male | White | Arts | Yes | >10 | No |
| **Dr. North** | Female | White | Sciences | No | <10 | No |
| **Dr. Owens** | Female | White | Arts | Yes | >10 | No |

Additionally, professors were sent a worksheet to fill out prior to the interview (see

APPENDIX A). The purpose of this worksheet was meant as an exercise in reflection, giving

professors time to think about their time teaching and allowing to prepare for the interview.

Though not all 15 professors returned their completed worksheets back to me, a number of them referred back to what they had written during their interviews.

## Data Collection

The goal of my study was to understand how professors at a research university understood and explained the factors that have influenced their teaching during their time at MSU. I wanted to hear about the factors and their experiences teaching, and to better understand how their teaching may have developed or changed during their time as professors at MSU. Conducting 15 individual interviews (that ranged in length from 60 to 90 minutes) was be the best way to accomplish my goal of answering my research questions because they provided me the opportunity to interact with the professors, learn more about them, their experiences, and their teaching, and try to gain a better understanding of how the influences that have affected their teaching during their time at MSU. Merriam and Tisdell (2016) described interviews as "necessary when we cannot observe behavior, feelings, or how people interpret the world around them' (p. 108). Such an importance placed on individual interviews was befitting of my study, given its focus on how a professor understands and explains the factors that have influenced their teaching.

The 15 interviews I conducted were semi-structured, as "this format allowed me to respond to the situation at hand, to the emerging worldview of the respondent, and to new ideas on the topic" (Merriam & Tisdell, 2016, p, 111). I wanted to strike a balance between remaining consistent with my protocol in all 15 interviews and allowing myself to be open to asking for more information about specific answers provided by the professors. With so much of this work predicated on experiences and reflections of the 15 professors, I wanted to craft my study in a way that encouraged the professors to tell their individual stories about their time teaching at

MSU. I wanted to understand each professor's experiences teaching and how it has been influenced by the institution as completely as possible. It was also very important to me to ensure their opportunity to answer my questions honestly, openly, and completely, so that I could best understand the professors, their experiences teaching, and their explanations.

All 15 interviews were recorded (on both a digital voice recorder and a smartphone, as backup), they were initially transcribed using Otter Voice Notes (otter.ai), and then reviewed and edited for transcription accuracy and analytical purposes. The transcription process was "another means of generating insights and hunches about what is going on in your data" (Merriam & Tisdell, 2016, p. 200) and a vital part of the data collection process, as repeated reviews of the individual interviews yielded a deep understanding of the responses, codes, and themes throughout all of 15 interviews. The results were initially separated into 10 different themes and then grouped into four different themes (see APPENDIX C) based on my analysis and overall comprehension of the data I collected from my 15 interviews.

**Interview Questions**

My interview protocol (see APPENDIX B) focused on a professor's understanding and explanation of their experiences teaching, the environments and interactions that have influenced their teaching, and how their teaching has developed or changed over time (specifically during their time at MSU). In terms of teaching, I asked the professors how their graduate programs valued teaching and how – and where – that intersected with how they valued their teaching. I also included questions about why the professors still teach, how they have developed their teaching over time, and who and/or what has influenced their teaching. Questions about a professor's environments and interactions revolved around the value others (individuals, groups,

and institutions) placed on their teaching, how those values have been communicated, who or what has conveyed those values, and how MSU has influenced their teaching.

## Data Analysis

Data collection and its analysis occurred simultaneously throughout my study in order to produce work that was "shaped by the data collected and the analysis that accompanies the entire process" (Merriam & Tisdell, 2016, p. 197). Flick (2014) described the process of data analysis as "the classification and interpretation of linguistic (or visual) material to make statements about implicit and explicit dimensions and structures of meaning-making in the material and what is represented in it" (p. 5). For the purposes of this study, I sought to understand professors at a research university and the how their teaching was influenced by their environments, individuals in those environments, and their interactions with both.

Coding was done in order to identify and organize the influential factors on a professor's teaching that arose throughout the 15 interviews I conducted. A code is "a word or short phrase that symbolically assigns a summative, salient, essence-capturing, and/or evocative attribute for a portion of language-based or visual data" (Saldaña, 2013, p. 3). Additionally, Merriam and Tisdell (2016) described coding as "nothing more than assigning some sort of shorthand designation to various aspects of your data so that you can easily retrieve specific pieces of the data" (p. 199). Essentially, my coding created categories and themes, which served the simultaneous purpose of synthesizing the data and furthering the process of answering my two research questions.

To align with my two research questions (and to then answer them), my 10 codes reflected the various influences on a professor's teaching that were mentioned throughout my 15 interviews. The 10 codes represented the various individuals, environments, interactions,

experiences, values, and reflections that all influenced a professor's teaching their time at MSU. From those 10 codes, I created 4 themes that aligned the properties and systems found in Bronfenbrenner's bioecological model of human development and represented consistent and overarching "interpretations and reflections on meaning" (Richards, 2015, p. 135) found in all 15 interviews. If life is full of fragments and moments (Clandinin & Connelly, 2000) and its meaning has many dimensions and layers (Van Manen, 2001), then I aimed to better and understand these complexities and represent them in my data analysis about understanding the influences on a professor's teaching.

## Chapter Summary

In this research, I sought to understand how professors at MSU understood and explained the factors that have influenced their teaching. A constructivist paradigm, which is rooted in understanding how others construct meaning, was used to better comprehend a professor's teaching and how it has been influenced by various individuals, interactions, and environments. The constructivist approach generated data that provided me with insight into a professor's teaching, how they have developed as teachers over time, and how their teaching has been influenced by interactions (specifically with other individuals and environments) at MSU.

The focus of my study was on 15 award-winning professors, their experiences as teachers, the various environments they find themselves with, and the ensuing interactions that take place that ultimately influence their teaching. An emphasis was placed on the 15 professors and the environmental factors that have influenced their teaching at the MSU (specifically the impact of individual and institutional interactions). Understanding the institution was critical to this research, as how MSU valued, awarded, and rewarded teaching influenced the professors and their teaching. How a professor felt – and even cared – about their teaching was affected

both by how others valued and recognized the work they did as teachers and how the 15 individual professors worked to value and recognize their teaching, too (though the two did not always align).

The goal of my study was to better comprehend how professors at a research institution understood and explained the factors that have influenced their teaching (especially during their time at MSU). And the data I collected was what my research was designed to focus on: a professor's experiences teaching, how institutional environments and individuals influence that teaching, and the degree to which various interactions contribute to their development as teachers.

# CHAPTER FOUR: FINDINGS

## Introduction

When 15 professors were asked why they wanted to teach at a research university, their answers fell into one of two categories: 12 referenced their research and three talked about their teaching. For professors teaching at a research university, their split answers were not necessarily surprising, as research and teaching represent the majority of a professor's job description. As the rest of the interviews revealed, a professor's research is not the only influence on their teaching, but given the nature of their chosen profession, it is certainly the most complex one.

At the same time, when the professors spoke of their research and teaching, they did not pit the two as adversaries; rather, professors often described the two as being more complementary than contradictory. The 15 participating professors were selected because they were all recipients of MSU's Teacher-Scholar Award (whose name alone implies at least a degree of symbiosis between a professor's teaching and research), which meant that they had been acknowledged for their achievements in both teaching and research. That the professors had won such a prestigious award was impressive, but it was how and why they had that was important and served as the basis for the interview protocol. And, after 15 interviews and hundreds of my questions and their answers, how the professors understood and explained the factors that have influenced their teaching was as clear as it was complex. This chapter will present how the 15 professors spoke about navigating the process of learning how to teach at a research university, how they used assessment as a tool for both proving and improving their teaching, the importance they placed on being recognized for their work, and, ultimately, why they choose to prioritize their teaching in environments and amidst individuals that may not always do the same.

*Table 2.* *Teaching at a Research University*

| | **Why did you want to teach at a research university?** |
|---|---|
| **Dr. Armstrong** | *Well, I like teaching motivated people. You don't get that in high school.* |
| **Dr. Brand** | *There is a crossover between the research and the teaching, in the sense that a lot of the research that I do is highly applicable to what I teach.* |
| **Dr. Camden** | *So, I'm the product of one. So that's probably the biggest part for me. And I'm super happy that I ended up at a place where something like, two thirds of my job is research-focused. But, a good chunk of it is…my annual evaluation goes into teaching. And so, I feel like I can justify, in a rational sense spending a good amount of time on it, because I know that it's something that I'll get evaluated for. And then, when I get my raise letter, that it's something that I can be rewarded for.* |
| **Dr. Dalton** | *Well, I wanted to do research at a research university, and teaching is part of the gig. I enjoy teaching.* |
| **Dr. Edison** | *Overall, I enjoy teaching. My research is probably something that is what actually drew me to the field, though. And it's something that I devote a lot of time to. And I kind of consider the foundation of my career. And teaching is something that I care about, but it's something that is what I do here during the semester. The practical answer is this is the job I got. Like everyone, you just apply for everything that's open and hope that something sticks. And this is what stuck.* |
| **Dr. Foss** | *Because you have to. I wanted to work at a research-intensive school and, I wanted a faculty position. And so, of course, you have to do teaching. I'm just being honest. It's not like I said, "I want to go teach at MSU." I said, "I want to work there." It was part of the job.* |
| **Dr. Gordon** | *Because that's exactly why, because research is important. I think it's wanting to do both teaching and research…Through the practice of teaching it, you're able to go on a journey with the student. And with the practice of research, you're able to dig deeper into what you do.* |
| **Dr. Houston** | *I just wanted an academic job.* |
| **Dr. Isaac** | *I wanted to* work *at a research university, because I value research quite a bit.* |
| **Dr. Jacobs** | *I didn't* necessarily *want to teach at a big research university because I have ideas of what that means (that it didn't align with how I value teaching). So, yea, that was not why I came here.* |
| **Dr. Kotz** | *Because I like to do research.* |
| **Dr. Lawrence** | *It's the place that hired me.* |
| **Dr. Matthews** | *Although I like teaching, the major passion, for me, was writing.* |
| **Dr. North** | *The research is a big part of my life. But I didn't want to take a job at a like a medical school or something, where there was* no *teaching. I like it.* |
| **Dr. Owens** | *It wasn't even so much about the research, because I kind of take a very sort of research orientation to my teaching anyways. So, I sort of thought, "You know, even if I end up in more of a teaching-focused institution, I'm always going to be very scholarly about my teaching."* |

**Navigating the Process of Learning How to Teach at a Research University**

When the 15 professors were asked why the wanted to teach at a research university, 12 answered by focusing primarily on their research. Dr. Dalton, for example, "wanted to do research at a research university, and teaching was part of the gig." Other professors (Drs. Gordon, Houston, and Isaac) echoed Dr. Dalton's agreeable tone, acknowledging the importance of their research, and accepting the associated teaching responsibilities. But a few professors, like Dr. Foss and Dr. Lawrence, were a bit more acquiescent, the former of which candidly responded: "Because you have to. I wanted to *work* at a research university." Ostensibly, I asked all 15 professors a question about teaching at a research university, but that 12 of them responded by talking about their research belied the apparent simplicity of the question and implied the complexity of the relationship between the two.

## A Professor's Teaching Preparation

All 15 of the professors I interviewed came to MSU knowing what the job entailed. Even the 12 professors that emphasized the opportunity to further their research understood – and accepted - the teaching responsibilities that came with the job. Teaching was something the professors knew they would have to do, even if they did not necessarily know how to do it. As experts in their respective fields, none of the 15 professors were wary or nervous about the research component to their job; it was literally what they were trained to do. Teaching, on the other hand, was a different story. As Dr. Matthews explained,

> Academia is a somewhat unusual field. For a large part of the job, you received
> no training in. And nor does anybody evaluate you on your likelihood to be good
> at it, before you get your first position.

What Dr. Matthews' response reflects is the assumption made regarding a professor's knowledge about a subject and their knowledge about how to teach a subject. Knowing their subjects is what earned the professors their degrees and helped get them their current jobs at MSU; but not being vetted or prepared for teaching, and then teaching their subjects is what added challenges for the professors when they started at MSU.

When talking about how prepared to teach the professors felt before they started at MSU, their answers were dependent upon their previous experiences teaching and the degree to which the professors felt like those experiences sufficiently prepared them to teach at MSU. Most of the professors I interviewed had taught prior to coming to MSU (as a PhD student, Teaching Assistant (TA), or as a faculty member at another institution), and they largely felt prepared to teach. But not all of the professors felt that way. Dr. Gordon, "had never taught, so I didn't know anything about teaching," but was still expected to fulfill the same teaching responsibilities as everyone else in his department. Yet, even if a professor had previous teaching experience, that did not necessarily equate to them feeling prepared to teach as a professor at a research university. Dr. North – who had been a TA for three years in graduate school and had participated in multiple other teaching experiences – was "not at all" prepared to teach at MSU. Dr. Isaac – who had also been a TA in graduate school and even a K-12 substitute teacher for a few years – "didn't feel that well-prepared, largely because I hadn't had a whole lot of experience." Dr. North and Dr. Isaac, like many of their peers, had taught in the past, but did not necessarily have the type of experience that adequately prepared them to teach a college class of their own.

All 15 of the professors mentioned the new faculty orientation they went through before their first semester at MSU, but recalled hearing more about the effects of teaching (evaluations

and tenure) or what may affect their teaching (campus resources and D2L), than how to effectively teach. Not one of the 15 professors mentioned the orientation's application to their teaching, given that much of what was covered was contextual to the type of experiences the professors had yet to have at the university. Dr. Jacobs mentioned – and then showed me – the copy of *How Learning Works* that she had been sent, but that was the lone representation of the training's productivity.

Regardless of previous experience, training, or preparation a professor had prior to MSU, many spoke about the sometimes uncomfortable learning process once they began teaching at MSU. As Dr. Edison acknowledged, "When I was a graduate student, I felt like I was actually pretty effective in the classroom. When I came here, my first semester taught me that I was just really woefully underprepared." When asked to elaborate, Dr. Edison talked about all of the time he spent as a TA "observing and modeling and imitating" other professors, not having any "pedagogical training," and, ultimately, how teaching was "something I had to learn through experience." Even Dr. Owens – who had taught as a professor at another research university – explained, "I felt like it's weird to be a teacher, when you're so much in the position of, *you* have to learn so much." Even for professors with previous experience at a faculty member, there was a degree of apprehension associated with experts (in their subjects) potentially feeling like novices (in teaching their subjects) in a new environment. The act of teaching may not have been completely new, but the setting, responsibilities, and expectations were; through teaching at MSU, the professors learned that teaching and learning how to be a teacher were not necessarily the same thing.

**The Available Teaching Assistance**

Akin to the teaching training and preparation MSU offered the professors, many also mentioned their peers and their willingness to help, but also acknowledged the limitations associated with the assistance. Drs. Armstrong, Foss, Kotz, and Lawrence all mentioned previous syllabi and PowerPoint slides they were given, but none mentioned being told how to teach the material they were given. Dr. Dalton recalled both the materials and the "useless, vague advice" their predecessor provided, which contributed to making his "first semester teaching just a complete shitshow." Similar to the teacher training MSU provided the professors, much of the peer assistance they were offered was equally limited because of its focus on what had been taught in the past, rather than on how material could be taught in the future.

If the issue with the materials was their prefabrication, then the challenge of any mentoring was its prescription. In many departments, the professors were assigned mentors, who tended to be chosen more for their years of teaching experience than their teaching expertise. And if the two professors did not share similar values and approaches toward teaching, then the new professors were unlikely to turn to their assigned mentors for guidance or advice. Dr. Matthews only accepted help from people who had visited his classroom because, "Otherwise, I just don't think that, typically, the testament is enough to rely on." Dr. Matthews echoed the type of vetting process mentioned by others, as many professors did not see the benefit in taking guidance or advice about teaching from peers who did not share similar values and approaches.

For as much as the professors may not have always utilized the teaching assistance they were offered, nor did they tend to seek it out, either. None of the 15 professors mentioned using any of the available campus resources, with Dr. Dalton explaining how they were meant for more professors that were "baseline teachers" who "had no idea what they were doing." A few,

like Dr. Armstrong, tended to have "small talk" with his peers about teaching, but that may have had more to do with its value, as Dr. Isaac put it, "collegial currency" than its application in the classroom. Dr. Jacobs and Dr. Lawrence both mentioned how much they utilized the feedback of a specific peer, but when asked who that peer was, they each mentioned the other. Dr. North was an exception, as she taught a large introductory course with a number of other professors and was the only professor that referred to their peers as a "very collaborative group" (partly out of necessity, as the professors had to ensure they were teaching the same material in a similar fashion). The responses of Dr. Kotz and Dr. Owens also stood out because both feared their teaching inexperience would be considered ignorance and both avoided asking for help. Dr. Owens "didn't want anybody else in my department to know how difficult this is for me" and Dr. Kotz "didn't want to give my colleagues the impression that I didn't know what to do." When asked for further explanation, Dr. Kotz cited being "deluded by good evaluations" for not asking for help and Dr. Owens talked how long it took her to finally ask a colleague for help (emphasizing the catharsis of the act, not the content, of the response it generated). All 15 of the professors understood the peers and resources available to them, but whether or not they used them had more to do with a professor's willingness to seek out the help than on the availability of the help.

*Table 3.* *Teaching Help*

| | Where do you turn for help in teaching? |
|---|---|
| **Dr. Armstrong** | *Internet. Other faculty. That's about it.* |
| **Dr. Brand** | *Talking to colleagues about my teaching experiences, "Oh, I did this today that was awesome!" And they bring something, "Oh, can I borrow that?"* |
| **Dr. Camden** | *Primarily, my Wife and I talk about it a decent amount. She's teaches.* |
| **Dr. Dalton** | *At this point, I don't really look for help at the tactical level, if that makes sense. So, MSU has a lot of really good resources for people who are trying to go from baseline, "Just got here…know that I have teach, I've no idea what I'm doing" to being a good teacher. There's a lot of resources for that.* |
| **Dr. Edison** | *That's a good question… there's no formal resource that I I've turned to…* |
| **Dr. Foss** | *I use the D2L help desk every now and then.* |
| **Dr. Gordon** | *Mentors. Calling people. You get a lot of help with teaching, by just asking the students what's good and what's not. You can also, really, just tell what's working, based on their progress. And, for me, that's usually the best guide.* |
| **Dr. Houston** | *I find it really useful to hear from somebody's who not like me (when it comes to their teaching). And then, having informal conversations with people.* |
| **Dr. Isaac** | *It'll be informal conversations.* |
| **Dr. Jacobs** | *I think it varies for me. I think I do use peers a lot (Dr. Lawrence). I also have some mentors, that are not necessarily my peers, but are more mentor-y (Dr. Dalton).* |
| **Dr. Kotz** | *I think I tend to be reluctant to seek help. I think part of that is because I don't want to give my colleagues the impression that I don't know what to do. I want to give them the sense that I know what's going on, I'm in control, etc. Maybe to a fault.* |
| **Dr. Lawrence** | *I bounce off ideas, for sure. So, I talk to Dr. Jacobs, my colleague, quite a bit, about just things that I'm doing, and asking like her thoughts on it.* |
| **Dr. Matthews** | *I would say I don't.* |
| **Dr. North** | *If it's something directly related to the course, the other instructors. We're a very collaborative group.* |
| **Dr. Owens** | *Where I'm working with colleagues, that's been my primary source.* |

**The Applicable Teaching Assistance**

For all the various teaching resources MSU provided and for all the various reasons the

15 professors did not necessarily use them, one "resource" five of the professors mentioned was

the Lilly Teaching Fellows (LTF) program. Faculty/staff with five years teaching experience can

apply for one of up to six fellowships that necessitate regular meetings, require a Scholarship of

Teaching and Learning (SOTL) project to be completed, and provide a stipend to ensure the project's success. I refer to it as a "resource" partly due to its selective application process, but also due to how selectively the participating professors seemed to apply what they learned to their teaching. For most of the professors, the LTF was the first time they had been introduced to the scholarship and literature on teaching (beyond the book they may have received during their MSU faculty orientation anyway), and it encouraged the professors to think differently about their teaching. Dr. Houston, for example, often enjoyed "Reading the scholarship and being like, 'Oh, there's a name for what I do! Oh, I've been doing that!' And, actually, there's evidence that it works well." Dr. Camden "Did this fellowship thing and just gained more of a toolkit, and a language to talk about and think about, and framework to think about this material," and Dr. Dalton said the LTF "Helped me change my mindset from, 'Teaching is this thing that I do, that I don't really have kind of an intellectual framework for' to thinking about it more rigorously." Drs. Camden, Dalton, and Houston entered the LTF as dedicated teachers, and appreciated the context the scholarship and literature provided to affirm and strengthen something they already did well. Dr. Owens, whose entire background and experience is in education, said the LTF encouraged them to have an even more "honest, reflected practice." Four of the five professors appreciated the theoretical nature of the LTF, and how their involvement helped them think more deeply about their teaching and to think about in a more scholarly fashion. Dr. Edison, was the exception, and critiqued the focus of the fellowship:

> There really wasn't a practical component to it…at least one that I found useful,
>
> where I could take practical problems from the classroom into the group to
>
> discuss. We were just discussing more about trends and literature and things like

that. So even that resource, which I thought held a lot of promise, felt really

divorced from the everyday experience of the classroom.

Ultimately, like any other resource available to them, the professors found the LTF as helpful to

the degree it helped them further advance the teaching they were already doing. The four

professors who benefited from participating did not necessarily see the LTF as improving their

teaching, so much as it encouraged them to think in a more scholarly way about the things they

were already doing in the classroom. But for Dr. Edison, who wanted and expected to learn

things that could be applied directly to the classroom, the LTF experience was a disappointment.

Like any other teaching resource, assistance, or aide, the professors found the helpfulness of the

LTF to be a product of how it advanced or contextualized what they were already doing (rather

than necessarily teach them anything new).

## Managing Expectations and Time

For the professors, perhaps the most challenging lesson involved in learning how to be a

teacher was figuring out to do so in a way that was successful, without sacrificing their other

responsibilities. Dr. North provided further context, acknowledging that, "The content is not the

hurdle. I know the [subject], that's what I'm trained to do." The "hurdle" professors mentioned

most often was managing the time their teaching responsibilities took in a way that was

conducive to productivity and success in all aspects of their job. Dr. Isaac limited class

preparation to specific nights of the week because he "knew it will probably consume much

more time than that if I gave it" and Dr. Matthews "was always conscious of having to protect

my time, from over-investing it." When asked for advice by new professors, Dr. Dalton tells

them, "You should be investing enough time to be not bad at teaching, and then don't invest

much more time" because as much time as possible should be put toward their research.

Even over time and with teaching experience, the pressures on a professor's time never went away, they just changed. When the 15 professors talked about their first semesters teaching at MSU, they talked about class preparation in practical ways: planning lectures and activities and writing assignments and exams. And when the professors were asked about their most recent semesters teaching, they still talked about the time it took to prepare for class, but now used that time for more pedagogical (versus practical) purposes. When asked what had changed over time, Dr. Camden acknowledged "The total amount of time probably is about the same, but I would say it's more efficient time because I know more." Drs. Dalton, Edison, Gordon, and Owens all talked about focusing more on student learning, with Dr. Houston offering the best explanation of how her class preparation has changed since her first semester teaching: "I focus a lot less on content now, and a lot more on skill development now and creating opportunities for my students." After years of teaching, the professors were now able to "recycle" (Dr. Kotz) or "fine-tune" (Dr. Lawrence) class content, but class preparation still took a similar amount of time because now the professors were focusing on why they were teaching certain content and how to teach it in ways that best lead to student learning. A professor's teaching still took time, but how the professors were using that time had changed. Certain aspects of teaching may have gotten easier and now took less time than they used to, but now professors were thinking about teaching differently and used the same amount of time. Additionally, most of the professors were now tenured, with additional research, services, and, in many cases, personal responsibilities than when they first started; as Dr. Matthews admitted, "Now, I am *enormously* overcommitted." The pressures and influences on a professor's time may have changed, but they did not go away; professors had to learn new ways to prioritize and spend their time as they were presented with new challenges to navigated and expectations to exceed.

For all that changed over time for a professor teaching at MSU, so did the institution's focus on research; it began very high and continued to increase every year. As Dr. Lawrence recalled being told, "What gets people tenure this year will not get people tenure next year. It was messaging that, 'We are constantly moving the bar up.'" Dr. Jacobs furthered MSU's emphasis on research, explaining how professors are "expected to do our research and do teaching when you can. And if you're good at teaching, that's great. As long as it's not getting in the way of your research." Based on the responses of Dr. Dalton and Dr. Jacobs, and the emphasis both placed on research (over teaching), it would fair to assume a tension between a professor's teaching and their research. But, as Dr. Brand explained, perhaps the tension lies elsewhere for professors teaching at a research university,

> Teaching preparation takes a long time. And because this is a research institution, you have to put limits to it. There are other things that are expected of me to be done every single week. It's a bottomless pit to be at good teaching. There's no time to make it phenomenal.

While Dr. Brand echoed what his peers had said about the prioritization of a professor's research at a research university, he also suggested the issues lies more in the individual than their environment.

Rather than blame external factors and expectations as the reason a professor may have felt like they had too much to do in too little time, Dr. Brand emphasized the individual's professor's responsibilities and choices. According to Dr. Camden,

> That's part of the reason people have a sour attitude towards teaching is that, they do view it as zero-sum because they let it take more time than maybe it should. And then they blame teaching for the fact that they can't manage their time.

Where other professors had positioned certain external environmental factors (lack of training, inadequate peer assistance, and research requirements), Dr. Brand and Dr. Camden shifted the conversation to position everything an individual professor does to be a product of the choices they make (how they prepared to teach, who and where they go for advice, and how they allocate and spend their time). Such a shift does not remove the environmental influences on professors teaching at MSU, but it does reframe those influences in a way that gives individual professors a shared responsibility of understanding, navigating, and even affecting them, too. And through a professor's decisions and actions, the surrounding institutional influences remain powerful, but can become more manageable (or, at least, tolerable) for the individual. For the professors, it would be ideal if MSU valued and prioritized their teaching more, as it would allow the professors to do the same; but without such an institutional change, the professors try to mitigate the influences and pressures on their time by being great researchers and good enough teachers.

### Using Assessment as a Tool for Proving and Improving a Professor's Teaching

Of the 15 professors, three talked about being excited to teach at a research university. The three professors were Drs. Armstrong, Owens, and Jacobs, the first two of whom spoke primarily of their interest in and passion for teaching. That Dr. Armstrong and Dr. Owens emphasized the teaching component of working at a research university is not surprising, as they were two of the four professors (Drs. Isaac and Lawrence were the other two) that had K-12 teaching experience prior to MSU. For Dr. Armstrong, the appeal of teaching at a research university was because he "liked teaching motivated people" and knew he would not find equally driven students in K-12. Similarly, Dr. Owens "knew I was going to have a lifetime of teaching,"

even though she also knew it was not going to be in K-12 (soon after becoming certified to do so). Dr. Armstrong and Dr. Owens both had a background in teaching, so that they answered why they wanted to teach at a research university by talking about their teaching was not commentary on their research, but rather, their reason for initially wanting to work at MSU.

**A Changed Motivation**

The 15 professors had been teaching at MSU for between six and 12 years, so after being asked why they wanted to teach at a research university, they were then asked what motivated them to keep teaching. I understood that they took the job to teach and do research, but I wanted to understand what had keep them doing the same job for as long as they had at MSU. And where the initial question produced answers that fit into one of two categories, the follow-up revealed both a greater breadth of responses and a greater depth of meaning and nuance, too. Dr. Camden and Dr. Jacobs were straightforward and simply said they liked teaching. Both Dr. Brand and Dr. Foss found teaching to be a rewarding experience. Drs. Dalton, Houston, Lawrence, Matthews, and North all drew their motivation from their students and enjoyed how teaching afforded them opportunities to interact with students and watch them grow and develop over time. Dr. Dalton "came to appreciate that the teaching that I was doing was going to have more of an impact, globally, on people than the research that I was doing." Similarly, Dr. Kotz said, "I love it because you feel like you are impacting people directly and it gets me to think. I learn a lot from the teaching experience, because I have to really know my stuff." In articulating their motivation toward teaching and talking about its potential impact, Dr. Dalton and Dr. Kotz also revealed the reciprocal effects of teaching and learning on both the professors and students involved. Simply, yet profoundly, professors were motivated by how much they learned from teaching their students, and how it turned them into students, too.

64

In talking about how they were affected by their own teaching, many of the professors described the challenges they face as teachers. Dr. Armstrong, after a decade of being a professor at MSU, talked about time constraints, saying "I feel like I'm falling a little short, mostly because I've forgotten what it's like not to know some of these things; I've been doing it for so long now." For Dr. Edison, the challenge of teaching was that it changed over time:

> My motivation for teaching has changed from simply, something I need to do to keep this job, to something that, at times, is a challenge in the sense that I have to decide how I want to present this material.

In talking about how teaching has shifted from an act of job retention to the art of content delivery, Dr. Edison also framed teaching as an ongoing process of teaching and learning that did not necessarily get any easier over time or with experience. As Dr. Owens described, "I saw teaching as this fountain of unending challenges to try to face." Dr. Gordon echoed similar – yet perhaps more optimistic - sentiments: "Teaching is kind of like the ocean, the dynamic is always changing. Your tool and techniques are always changing." Though many of the professors presented teaching as a challenging process, none of the 15 said they did not like it, could not do it, or resented their responsibilities as teachers.

**Teaching Evaluations Reconsidered**

All 15 talked about the Student Instructional Rating System (SIRS) forms (see APPENDIX D) that students fill out at the conclusion of each semester as a way they received feedback about their teaching. MSU takes the SIRS (Michigan State University Faculty Handbook, 2018) information and uses them to:

1. *Provide instructors and teaching units with an accurate account of student response to their instructional practices, to the end that classroom effectiveness be maintained at the highest level of excellence.*

2. *Provide teaching units with one kind of information to be considered in deciding on retention, promotion, salary, and tenure, to the end that effectiveness in instruction constitutes an important criterion in evaluating the service to the University of members of the teaching faculty* (Section V. Instruction, para. 1).

The university's SIRS language (last updated in 1979), is important to note because "classroom effectiveness" is measured primarily to reward a professor's teaching performance, not necessarily improve it. Given how the SIRS are used, most professors were then critical of what they actually measured. Dr. Camden described the SIRS as a "crummy way" to get feedback on his teaching because "it's hard to assess content, if [students] have learned thing." Dr. Dalton even assessed the assessment tool, doing a statistical analysis to show that only two of the 28 questions mattered: "If the students liked the subject and like the professor coming in, they're going to give good ratings. And, if they don't, they're not." Regardless of how well a class may have been organized or taught, a professor would not score well on the SIRS if students did not like what they were being taught and who was doing the teaching. At the same time, a poorly taught course may still generate good SIRS scores for a professor if they and their subjects/courses were both well-liked.

The 15 professors, whose evaluations were influenced and informed by their SIRS, tended to have complicated relationships with their SIRS results because they knew how important they were to their evaluation process, but also how limited they were in actually

measuring teaching performance. As Dr. Edison explained, "When it comes to yearly evaluations of a faculty member…absent any sort of classroom observation, the only evidence in your file of your teaching are SIRS forms, which don't give a full portrait of your teaching." SIRS is an assessment tool designed decades ago by MSU to address specific institutional and departmental needs; but if a professor wants to address the specific needs of their students, then they have to design their own assessment tools to address those needs. So, where the professors may not have had a choice about the SIRS being used by others to evaluate their teaching, the professors were able to choose how they let the results affect them (and their teaching).

Some professors, especially early in their teaching careers, took the SIRS feedback personally. Dr. Kotz was the only professor who focused only on his good evaluations, positioning the positive responses as confirmations, and acknowledging that "maybe I am kind of deluded by the evaluations" because "I see these good evaluation scores and I think, 'Okay, I think things are fine" (which also may be a reason why Dr. Kotz may have been reluctant to ask for help, as it was thought to be unwarranted or unnecessary). But for some of the others, it was the negative responses that stuck out for – and with – the professors. Dr. North, for example, "cried my eyes out the first year" because "there were some comments that were *so* harsh" (other professors expressed strong reactions, but none of the others mentioned being brought to tears). Dr. North eventually accepted that "There's always some [students] that hate you and there's nothing you can do about it," reflecting how she separated the commentary about her teaching from the criticism about herself. Similarly, Dr. Brand talked about "recognizing that not everyone is going to be accepting of who you are, and part of the student evaluations is not an evaluation of my own teaching." For the professors, the issue was not if the SIRS feedback

67

influenced them, but how they let it affect them personally and how they used the information to inform their teaching.

As much as the professors tried to do with their SIRS feedback, its timing often delayed when anything new or different could be implemented in the classroom. Students fill out their SIRS at the end of each semester, and then professors have to wait for them all to be processed before they get any information back. Thus, the SIRS tended to function as a summative specific assessment process for a specific class, rather than formative one beneficial to a professor's teaching. But a few professors mentioned doing their best to use their SIRS feedback to make them better teachers. Dr. Gordon offered the most positive response, saying, "They help me grow as an instructor, because if the comments are about things like organization of the class, or the types of assignments." Dr. Armstrong "keeps a couple of the nasty [SIRS] around" (one, in particular, is kept nearby and read often in class) because "they motivate me to adjust things." Dr. Matthews offered the most objective response to the SIRS feedback, noting that "If you're reading through and a student says something that upsets you, it's frequently because you know it's true." Dr. Matthews' response was especially insightful because it shifted the focus from the negative feedback to what a professor can do to better inform and even change their teaching (as well as their SIRS responses).

**Generating New Feedback**

For all the professors who did not necessarily like the SIRS or appreciate the type of feedback they produced, the most common response was to devise ways to generate different – and better – student feedback themselves. Dr. Camden was the only one who spoke about how to directly influence his evaluations. Dr. Camden, for "sort of self-interested purposes," talked about to affect how he was evaluated as a teacher:

You just have to know how to weight them. And if you're being evaluated off of

them, you have to know how to put your thumb on the scale so you get the values

you want. And you'd be dumb not to.

Though Dr. Camden "put [his] thumb on the scale" and "weighted" his SIRS by periodically

passing out candy or regularly reminding students that the "class is hard and an intellectual

challenge," Dr. Camden also created additional assessments, feedback loops, and opportunities

to check in with his students on an ongoing basis throughout the semester. Rather than rely on a

summative assessment (like the SIRS), Dr. Camden took a formative approach and used the

ongoing feedback to adjust how he was teaching that specific class and how he taught in general.

Dr. Camden simultaneously assessed student learning and his own teaching, thus doing more

with the feedback than was necessarily required.

In talking about how the professors received feedback about their teaching (and once

many were done bemoaning the SIRS), many mentioned creating their own assessment tools and

using the responses to both assess student learning and adjust their teaching accordingly.

Teaching is an iterative process, so the professors used their students as a feedback loop to

understand and better themselves as educators. Dr. Houston used the student responses "for my

own development of the class" and Dr. Gordon said he "get a lot of help with teaching by just

asking the students what's good and what's not." Dr. Armstrong asked his students to "just give

me some feedback, because I want to do a better job. And if I'm not doing that…I can't see

myself from outside. So, give me that feedback." And, according to Dr. Brand, "The students

really like being able to give feedback and having an open mind for them to give feedback." For

the professors who wanted to better understand and learn about their teaching, they went directly

to who they were teaching, and solicited feedback from their students.

A number of the professors mentioned discussing the feedback they collected about their classes with the students and creating an additional learning opportunity from the opportunity they had been given to assess their learning (and the professor's teaching). Drs. Brand, Lawrence, and Owens all presented the feedback to the class and talked with their students about what could and could not be done and what could and could not be adjusted moving forward. Dr. Owens, in talking about a recent feedback session, also reinforced the valuable role they can play for both professors and students:

> I spend a lot of time talking about their feedback in class. When I did that this
> semester – I never had this happen before – but a student responded to me saying,
> "I just want to say thank you for taking, nearly an hour, to discuss this with us. A
> lot of times we give feedback, and then nobody ever says anything about it."

The professors did this not because they necessarily had to (some departments required mid-semester check-ins, but none of the professors mentioned any specific questions that had to be asked), but because they wanted to; the professors wanted to understand their students and their learning, and make the necessary adjustments to the class and their teaching to improve and maximize that learning.

**Applying New Feedback**

Yet, simply because a professor may have collected additional feedback about their teaching, its usefulness is a product of its effective application to the class being taught. Dr. Houston uses the informal feedback for "my own development of the class" and Dr. Lawrence emphasized "needing to figure out how to make things work for [students] better if things aren't working for them." In addition to collecting student feedback, Dr. Lawrence also mentioned how

70

to use an assessment of student learning (an exam, in this example) as an assessment of how the students have been taught:

> When they do not do well on the exams, I usually don't blame them. It's that I didn't prepare them, we didn't have enough time or discussion around whatever it is, or I wrote a question that had weird aspects to it that we didn't cover well enough. It's not usually blaming them, because I'm writing the exam, they're not writing it.

By using the student exam scores both reflectively and reflexively, Dr. Lawrence took the time – and opportunity – to use the scores as a way to assess his own teaching, too (a practice Dr. Jacobs, when asked by Dr. Lawrence, "encouragingly" endorsed). Where other professors talked about using evaluations and assessments to better student learning (by bettering their teaching), no one articulated the type of ownership and responsibility that Dr. Lawrence did in his interview. All 15 interviews involved examples of professors using assessments to improve teaching and learning, but some (like Dr. Lawrence) just happened to be more explicit and earnest in the examples they provided for making those improvements. If one of the professors wanted to improve their teaching, one option was to just wait for their SIRS responses and then make the recommended adjustments for the next class they teach. But, if one of the professors wanted to make any adjustments in the course of a semester, then they needed to be in constant communication (via informal feedback, supplementary assessments, and conversations) with their students about their learning (and, reflexively, about the professor's teaching). That the professors felt like they needed voluntary and supplementary assessment tools (beyond the SIRS) to better understand student learning and try to better their teaching were not the only reasons for doing so. The professors also designed, collected, and processed their own informal feedback

because it may be the only way they receive quality feedback about their teaching. That the professors created supplements to the structures (like the SIRS and evaluative teaching observations) MSU had in place showed that the interviewed professors felt they were not necessarily designed or implemented in ways to be beneficial to their teaching.

As noted previously, professors mentioned the value of having their teaching observed, but noted its effectiveness to be rooted in the perceived quality of the observing professor. According to Dr. Dalton, "Mostly, you get feedback on teaching from having people who know what they're doing watch you." Dr. Jacobs agreed by asserting, "If you've never walked into a good class, you can't even imagine what a good class looks like." In both of their answers, Dr. Dalton and Dr. Jacobs implicitly acknowledged the importance of having their teaching observed by explicitly stating that the observations must be done by professors who know what a "good class" looks like. Drs. Armstrong, Foss, and Gordon all mentioned the collegial nature of their departments and colleges (how often a professor may just drop in to see what they might be teaching on a given day), but the observations were almost exclusively informal and not evaluative in nature. A few tenured professors mentioned the infrequency with which their teaching has been formally observed in recent years. Dr. Edison could not remember his last teaching observation and Dr. Brand said, "There's no one that comes and observes teaching." While most of the teaching help at MSU was available for professors who sought it out, some of it – like the formative assessment of teaching and learning in a specific class – necessitated the professors creating it themselves.

Given the lack of formalized teaching observations done by peers the professors deemed quality teachers, a professor's ability to do their own classroom assessment work also doubled as a necessity. The professors could rely on the SIRS, but many chose to couple that with other

assessment tools, as they understood its untimely and incomplete nature for affecting how a specific class was taught. MSU has structures (SIRS and formalized evaluative observations) in place designed to prove – rather than improve – a professor's teaching; they may help a professor get promoted, but they will not necessarily help them become better teachers. So, when it comes to professor's improving as teachers, many of the professors I interviewed took it upon themselves to ensure that the teaching they were doing is leading to learning (both for their students and for themselves as teachers).

### Teaching Recognition Is More Important Than the Form It Takes

Of the 15 professors, Drs. Armstrong, Owens, and Jacobs were the only ones who talked about their teaching after being asked why they wanted to teach at a research university. Dr. Armstrong and Dr. Owens spoke primarily of their interest in and passion for teaching. Dr. Jacobs, however, spoke about teaching at a research university in a different way: "I didn't *necessarily* want to teach at a big research university because I have ideas of what that means…that it didn't align with how I value teaching. That was *not* why I came here." Where other professors (like Dr. Foss and Dr. Lawrence, especially) emphasized coming to MSU because "It's the place that hired me" (Dr. Lawrence), none of the other 14 professors phrased their reasoning as reluctantly as Dr. Jacobs. But in order to understand why Dr. Jacobs ultimately took the job at MSU, it is important to understand the institutional messages professors receive about their teaching, how professors value their teaching, and the effects of those messages and values aligning (or not).

### A Research Emphasis

Though the 15 professors have received many messages from the university and department about their teaching, research, and service responsibilities, they were quick to

emphasize how much importance is placed upon the research they do. Dr. Armstrong was "told to prioritize research every step along the way" and Dr. Foss said, "research is the most important." For the professors, the messages about their research are as unrelenting as they are unsurprising. As Dr. Camden explained, "you sort of expect that to be true at a very high active research university. That's what we signed up for." Given that most of the professors chose to work at MSU primarily to further their research, that the university emphasized it in their messaging was predicted, though not necessarily always enjoyed.

That the professors expected the pressure that would be placed on their research did not provide solace from being surrounded by that pressure on a constant basis. As Dr. Dalton explained, "I think that everybody – very explicitly – expects faculty to be excellent researchers. And there's a huge amount of peer pressure to do so." For Dr. Lawrence, the pressure and messaging from MSU began on day one as a professor: "I remember this *very* distinctly – the messaging from the [new professor welcome] meeting, the very first meeting that I went to as a new hire was *about* research and what gets people tenure." Though none of the other professors remembered such immediate messaging from MSU about research and tenure, they did recall how often they were reminded about the importance of both (especially in relation to their teaching). Dr. Dalton, now in his 11th year as a professor at MSU, generalized what new faculty hear from the university about where and how they should be spending their time:

> [They] very clearly get the message that, "You should be investing enough time to
> be not bad at [teaching] and then don't invest much more time." Don't invest much
> more time than that, because if you have a spare hour, you should put it towards
> your research, not your teaching.

Other professors echoed hearing similar messages about tenure, in relation to their research and teaching. Dr. Houston recalled a mentor saying, "You have to get the book done to stay here, to keep being a great teacher" and Dr. Kotz recalled knowing that, "For promotion, you got to have a book, that's the end. I mean, you can be the best teacher in the world, but if you don't have a book out…" And it was Dr. Camden, who concisely described the pressures on a new professor: "No one's going to get tenured here at MSU because they're a great teacher. You can't get through tenure with a mediocre research record, you easily get tenure with a mediocre teaching record." Dr. North used similar language to describe service, "Nobody gives a crap about service. Nobody's tenure is granted or denied. No one's like, 'Oh, my God! She does great service!'" (which was the only time a professor mentioned their service in relation to tenure). For professors seeking tenure, research and teaching were presented – and interpreted – as dichotomous, as the professors understood they would have to sacrifice the latter for success in the former.

With time – and tenure – the messages the professors received about their research and teaching remained similar, though they did not stay exactly the same. While Drs. Camden, Edison, and Jacobs all recalled recent raises coinciding with their scholarship output, others provided a more nuanced interpretation of the messages they received at MSU. For as much pressure as the professors may have felt to produce research, they also understood that the institution valued their teaching, too. According to Dr. Brand,

> I think there's an implicit understanding that the priority is for research and grant-getting. But I should also say that this university also cares about teaching, which is great. And that tends to go in phases, depending on who is in the senior

administration. The Provost really is student-centered, cares about teaching, about

doing good job, and is really putting things in place to try and cultivate that.

Similarly, Dr. Kotz positioned MSU's value of his teaching as secondary to his research,

"Clearly, research is king. It's the most important thing for promotion. Teaching, though, is still

very important." Where the messages about a professor's research tended be rather explicit and

clearly tied to tenure, promotion, and funding, the messages about their teaching were more

implicit and relative to the individual, environment, and interpretation of "very important."

**Are the Values Shared?**

For the 15 professors at MSU, understanding the importance of their teaching meant

acknowledging how everyone did not define and apply the same word the same way. As Dr. Foss

explained, "Research is number one and teaching, as long as you don't do something terrible to

your students, then it will be fine." Dr. Dalton repeated the same language, saying, "Everybody

agrees that you probably shouldn't be a terrible teacher." Others echoed similar sentiments,

positioning the "value" and "importance" of their teaching to MSU to be rooted in adequacy

(rather than excellence). At the same time, it is important to understand the external nature of

those messages, and the ability of professors to differentiate the different people and places

where those messages originate." Dr. Dalton explained how he "gets different messages from

different parts of the university" by talking about the people delivering those messages: the Vice

President for Research and Graduate Studies' "interest in graduate students begins and ends with

their research productivity, not so much the teaching aspect of that," one of their departments "is

*incredibly* fixated on research" and "doesn't put very much value in teaching" and the other

department "is better about [teaching]." And Dr. Jacobs specified, "It's true that the institution –

the structure – doesn't value it, but there are definitely pockets and people and things inside the

university that do." Some professors found those "pockets and people" in fellowships, peers, friends in other departments, some (like Dr. Camden) created it through having discussions and providing examples of "good teaching," and some (like Dr. Jacobs and Dr. Lawrence) found it in each other. So, the onus is often put on the professor to find and align themselves with peers sharing similar values and approaches to teaching, as a way to shield them – and their teaching - from.

Even if a professor did not work in a college or department that shared similar values toward teaching, they still had the opportunity to find that with other people in other places at MSU. For the five dual-appointed professors I interviewed, their time at MSU is split between a residential college that greatly values teaching and a department that greatly values research. Drs. Dalton, Houston, Isaac, Jacobs, and Lawrence all spoke highly of their teaching experiences in the residential college, but some mentioned the challenges of being a professor in two very different environments. Dr. Isaac mentioned getting paid less to teach more than his peers, Dr. Dalton how his other department "doesn't put very much value in teaching, in the sense that, you are required to do it and required to do it at a minimally-acceptable level," and Dr. Houston talked about feeling less "research cultural pressure" in the residential college. And the residential college is the reason Dr. Jacobs took the job at MSU in the first place, asserting,

> I did not come here because it was Michigan State. And if Michigan State decided
> not to give me tenure because I cared about my teaching, I would go somewhere
> else. I would, I just would. If they don't want to value what I do, then I will not be
> here. So, I think that you hear all these messages and they work on you in your
> brain. But I also know in my heart that it doesn't matter as much to me as the

other stuff does. And so, if I can't be successful in this system, doing the thing I

care about, then I don't want to be successful in the system.

While all of the professors who were a part of the residential college spoke highly of its values,

the professors also represented a majority of the professors who were most critical of how the

university, as a whole, values teaching. Simultaneously, the dual-appointments tended to

galvanize a professor's value of teaching and exacerbate the issues they faced when their

teaching was not valued by others (especially those in the other department they were appointed

in).

The professors not teaching in a residential college still felt pressure and influence,

though perhaps more intrinsically and not as drastically as their peers. A handful of the

professors talked about the responsibility they feel to value the teaching they do because of its

value to others. According to Dr. Armstrong, "If you screw [teaching] up, nothing else really

matters," directly tying a professor's biggest responsibility to a student's biggest need. Dr. Kotz

talked about how teaching "has real world impact and effects" and the importance of ensuring

students are taught the right things in the right ways. Dr. Foss responded similarly, though more

ethically and fiscally, "You can't take money from people for their education, and then not

provide them with a proper education." Drs. Armstrong, Foss, and Kotz all understood that the

importance of their teaching was rooted in its importance to their students and explained how

one of the biggest influences on their teaching was how their teaching influenced others. As Dr.

North was explaining the rationale of having to teach less in order to meet the requirements of a

research grant, she offered this pragmatic response: "The teaching funds my salary, my research

funds everybody else's salary in my lab" (who, at the time of our interview, was in the middle of

accepting a research grant that required a reduced teaching load). Dr. North drew the shortest

line between her work and its direct effect on the people around her, though the more

philosophical answers of her peers still emphasized the internalization of those external and

environmental influences.

**A Localized Pressure**

Perhaps one of the biggest influences on a professor's teaching was themselves, and how

they synthesized the responsibilities on and of their teaching into motivation to teach as best as

they could. As Dr. Dalton put it, in "Teaching, the pressure is essentially entirely local. Either

internal, or just people mutually being supportive about it. It's rewarded, in the sense that, if you

do a good job of teaching, you'll maybe get an award." According to Dr. Dalton, and reflected in

the answers of his peers, teaching may have a lot of extrinsic expectations, pressures, and maybe

even awards, but the intrinsic need to meet his responsibilities combatted – and even outweighed

– those extrinsic influences.

At the same time, the 15 professors were chosen to participate in this research study

specifically because all had won the Teacher-Scholar Award at MSU (which only six professors

win on an annual basis). Per the Faculty Handbook (Michigan State University, 2018),

> The essential purpose of the award is to provide recognition to the best teachers
>
> who have served at MSU for seven years or less, taking into consideration that the
>
> most effective teachers will have their instruction intricately linked to and
>
> informed by their research and creative activities.

Coupled with the selection criteria (1. Instructional effectiveness, 2. Uses of innovative

techniques, 3. Scholarship and 4. Outreach), it is important to acknowledge that the Teacher-

Scholar Award recognizes professors who have most rooted their teaching in scholarship.

**The Power of Recognition**

When the professors were asked how winning the Teacher-Scholar Award affected their approach to teaching, Drs. Camden, Dalton, Edison, Gordon, Kotz, Lawrence, Matthews, and Owens all quickly pointed out how winning the award had not affected their teaching at all. But that was not true for everyone. Winning the award made Dr. Foss more "brave," Dr. Houston feel "confident," and Dr. Jacobs thought it was "very validating" because:

> I spend a lot of time thinking about teaching and working really hard to design things and work for students. And, most of the time, that feels pretty isolating. The only people who know you're doing it are the people who are in the classroom with you. When I heard I had been nominated, I was like, "Wow, somebody notices, right? Somebody notices that you're doing that work."

As Dr. Jacobs explained what it meant to have her teaching noticed, she began crying about how challenging it is to care so much about teaching in an environment where so few people (outside of their students) actually see how hard she works as a teacher. Winning the award did not necessarily change Dr. Jacobs' approach to teaching, so much as it acknowledged how other people (outside of their students) appreciated how hard she works as a teacher. As evidenced by crying over her nomination, that Dr. Jacobs was recognized for her teaching was more important than actually winning the award.

Though winning the Teacher-Scholar Award did not necessarily change all of the professors' approaches to teaching, some used the award as a tool to gain benefits. For some professors, like Drs. Foss, Houston, and Jacobs, they found validation and encouragement in being recognized for their teaching. For others, winning the award gave them what Dr. Isaac called "symbolic capital," because it changed how others may have viewed his teaching. Dr.

Armstrong and Dr. Dalton both mentioned offering teaching advice to their peers, Dr. Lawrence and Dr. Matthews talked additional projects they were able to work on, and Dr. Brand said winning "put more pressure to [teach] better, just to live up to that expectation." In describing how winning the Teacher-Scholar Award mainly affected how others viewing their teaching, the professors reframed what teaching recognition really looks like at a research university. As Dr. North explained, "Teaching is a job that you don't get as much recognition for. It's a big research university, you get a grant, and everyone hoorays. If you're a good teacher, you're just doing your job." Dr. North provided an important clarification, acknowledging that professors are recognized for their teaching, even if that recognition does not come in the same form or with the same enthusiasm as their research. Not all rewards are awards, and it can be up to the professor to know the difference and to know where to find the recognition they may need for their teaching.

When talking about an interaction (in class, in a meeting, or elsewhere) they have had where they felt their teaching was valued, all 15 of the professors revolved their answers around improvement and change. Most professors spoke about small – yet meaningful – interactions they had had with their students. Dr. Armstrong talked about "lighting a fire" in his students, Dr. Brand said it was "awesome when you see the lightbulbs," and Dr. Gordon explained how "seeing growth in a student because of an idea that may have been put in a student's head shows that there's value to [teaching]." Dr. Matthews, in his 12th year teaching, said, "It still makes you feel warm and fuzzy, when one of your students benefits." And Dr. Owens explained the great power of a simple gratitude,

> Getting [appreciative] notes is probably the most important…even more so than
>
> getting a Teacher-Scholar Award. I'm going to be honest, hearing students come

back and say, "Thank you." Right there, that's really showing me that what I've

done is valued.

Other professors, like Drs. Camden, Isaac, and North, all mentioned similar stories involving

their peers, echoing how they felt their teaching was valued generally through small interactions

and simple gestures. That the professors felt their teaching was valued, was more important and

rewarding that the shape the recognition took.

**Table 4.** *When A Professor's Teaching Was Valued*

| | **Can you tell me about an interaction (in class, in a meeting, or elsewhere) you have had where you felt your teaching was valued?** |
|---|---|
| **Dr. Armstrong** | *Non-traditional aged student…now pursuing a PhD in geography, and she credits me with it and that's very sweet of her.* |
| **Dr. Brand** | *In every class, I include at least one lecture related to racial bias. I think that's one of my best lectures that I ever give. It pushes students to think in critical ways. So, these interactions, where you see the lightbulbs, that's awesome! When you have that level of fascination with information, these are the interactions where I feel that my teaching is valued.* |
| **Dr. Camden** | *I handed off this Intro Poli Sci class to someone new this year, and we spent probably a couple hours, over the course of the summer at various points in time, chatting about what I thought worked in the class, what I thought didn't work, what I would do differently if I was redoing the class. And so, I think that there, she was very excited to get my perspective on the class.* |
| **Dr. Dalton** | *[Student feedback is] always very gratifying. Those are the kinds of examples that stick with me.* |
| **Dr. Edison** | *Just off the top, I don't think I've ever felt like my teaching is not valued.* |
| **Dr. Foss** | *What I really like, is hearing students say to me, "I used that at work. Or I used that in my internship."* |
| **Dr. Gordon** | *I've been in situations where I see an immediate change, that was a direct result of teaching. And so, at those points, I realize that it's valued.* |
| **Dr. Houston** | *Presenting to my colleagues about pedagogy.* |
| **Dr. Isaac** | *The kind of feedback that you can get from a mentoring experience is so unambiguous. That tends to be the clearest information for determining whether you've been successful or not. So, I'd say that it's been those relationships that have validated the kind of time that I put into them, and attention I give to these students* |
| **Dr. Jacobs** | *Student feedback and people coming to watch me teach. I think that that's a thing that communicates to me.* |
| **Dr. Kotz** | *Anytime a student sends me an email or comes up to me and says, "You changed my life." Or, "You opened my eyes to (blank)." That's always a good feeling.* |
| **Dr. Lawrence** | *Students will come and talk to me after the final and it's very clear that their experience in that class was* different *than their experience in all of their other Majors courses. And they're incredibly appreciative of that.* |
| **Dr. Matthews** | *Students will often send be quite long letters or cards and saying, quite specifically, what helped them. That's terrific.* |
| **Dr. North** | *One student wanted to come by and talk for two hours, that was pretty awesome.* |
| **Dr. Owens** | *Getting [thank you] notes like that is probably the most important…even more so than getting a Teacher Scholar Award. I'm going to be honest, hearing students come back and say, "Thank you." I get a lot of emails, "Hey, what's that task that we did? I'd like to use that in my class." Right there, that's really showing me that what I've done is valued.* |

When it came to talking about an interaction (in class, in a meeting, or elsewhere) the professors have had where they felt their teaching was not valued, the professors again talked about how much their teaching was impacted through the smallest of interactions. Drs. Armstrong, Dalton, Gordon, Isaac, Kotz, North, and Owens all mentioned specific SIRS feedback they had received in the past (specifically early in their careers) and many of them even mentioned how they had learned to not take that feedback so personally. Dr. Dalton said negative feedback "doesn't get under my skin liked it used to" because "I'm too busy and tired to give a crap," Dr. Gordon chalked it up to the learning process, and Dr. North "just [doesn't] worry about it anymore" because the negative comments do not outnumber the positive ones and, therefore, should not outweigh them, either. Regardless of background, all 15 professors took what was meant to be pedagogical feedback as personal criticism on the SIRS, and it took time before they learned how to separate the latter from the former (the process is an ongoing one for some, as evidenced by Dr. Armstrong still carrying and quoted a specific SIRS from more than a few years ago).

Other professors, like Drs. Brand, Houston, Jacobs, and Lawrence, all mentioned peer interactions, focusing primarily on those around them who did not appreciate their teaching because they could not understand the need to teach any differently than they had always taught. Dr. Lawrence talked about his "faculty meetings, when we have discussions around teaching and learning, there are consistently some number of folks that are just frustrated, because the world has changed around them and they're unwilling to accept that it has." Dr. Lawrence knew there were better ways to teach and proceeded to do so, even as some of his peers resisted such change themselves. Dr. Lawrence, like many of his other 14 award-winning peers, used such negativity in two ways: 1. To learn from it what he could (even if it was just accepting that not all feedback

84

is going to be positive) and 2. To not let the hesitancy or resistance of others to hold him back from teaching in ways he knew to be correct and validated (whether it be by awards, peers, students, or scholarship). Even those professors (Drs. Camden, Edison, and Foss) who initially said they felt their teaching was always valued were eventually able to recall specific pieces of negative feedback that they did not hold onto as tightly as some of their more positive feedback and memories. Simply because a professor was able to recall an interaction where their teaching was not valued did not mean they valued their teaching any less. That the professors, over time, learned how to influence the (negative) influences around them was perhaps the most profound lesson the professors learned.

**Table 5.** *When a Professor's Teaching Was Not Valued*

| | Can you tell me about an interaction (in class, in a meeting, or elsewhere) you have had where you felt your teaching was not valued? |
|---|---|
| **Dr. Armstrong** | An old SIRS form (that he kept, often carries with him, and sometimes even reads in class), that reads: *[Dr. Armstrong is] a "Hatchet man for the New World Order. Don't take this class unless you want to be lied to."* |
| **Dr. Brand** | *When the administration took the sides of the students, without listening to my perspective.* |
| **Dr. Camden** | *I don't have any really. Since we started doing the scoring of teaching as a separate category, I've felt like I get the credit that I've been due.* |
| **Dr. Dalton** | *I also don't really take it personally anymore. I feel like sort of, structurally, there are people who don't value the teaching as much, don't value the way that we teach (for whatever reason). And, sometimes, that manifests as not liking me, and I'm sure there are students that just genuinely dislike me, but I'm too busy and tired to give a crap. It doesn't get under my skin, liked it used to.* |
| **Dr. Edison** | *No.* |
| **Dr. Foss** | *Where it wasn't valued? I've never really felt like what I do is not valued. I've never felt that, personally.* |
| **Dr. Gordon** | *We've all made mistakes. I started teaching very young. I was 25 when I got the job with MSU. I still have students older than I am. I had students older than me then. So, a lot of times, my teaching may not have been valued, my opinion may not have been valued. At MSU, I have been lucky that that's down to the minimum of my experience as a teacher there. But there's definitely been situations where teaching is not valued, and it's simply because some things work for some people, and not for others. The art of teaching is, "Try everything and use what works." Sometimes things work and sometimes things don't.* |
| **Dr. Houston** | *It's hard, when you're excelling in the classroom, but if you don't get that big pub out, they're going to fire you. A year, 18 months before tenure.* |
| **Dr. Isaac** | *I think the one undergraduate class that was a lot of lecture (although I tried to integrate a lot of learned here into that class). I didn't seem to have a strong effect on students' understanding of the subject matter.* |
| **Dr. Jacobs** | *I would say most of my evaluation meetings.* |
| **Dr. Kotz** | *[A guest lecture where] I'm really putting everything into this lecture, and they didn't care. That's when I felt like I was wasting everybody's time.* |
| **Dr. Lawrence** | *I would say interactions that I've had with other faculty, in faculty meetings, particularly people who have never come to my class.* |
| **Dr. Matthews** | *There are students who (when they resist the pressure to go and do the research, find out what the experts know). I find that, periodically, quite frustrating.* |
| **Dr. North** | *Oh, lots of students complain about lots of stuff.* |
| **Dr. Owens** | *I don't know if I've ever…but I've never received that feeling from students. So, I don't know. I don't know. I don't have to answer that question, I'm sorry.* |

**Chapter Summary**

As seen throughout the 15 interviews, the selected MSU professors are surrounded by individual and environment influences on their teaching. Some influences, like a professor's development as a teacher and their student's learning, are ubiquitous opportunities to be planned for, assessed, and further improved. Others, like tenure or how others view their teaching, can only be controlled so much, and professors learn how to navigate the challenges they present. Influences like productive feedback and help (from peers, campus resources, and standardized evaluations) may be constantly available and accessible, but are only as influential on a professor's teaching as the professor chooses them to be (if at all). And still others, like validation and recognition, may not be there enough (in the desired form, quality, or quantity), but can be found if a professor is able to look for them or look at things (like the feedback they may not always like) differently, constructive, and even more positively. The 15 professors are surrounded by influences on their teaching, but they are surrounded by choices, too.

As evidenced throughout the interviews, the 15 professors navigated and managed the influences on their teaching primarily by the choices they made. The professors chose how much time to allocate to their different responsibilities, how to organize and teach their classes, how to collect and use formative assessments, how to appreciate the valuable teaching recognition they received, and how to care as much as many of them did about their teaching. Regardless of the expectations put on them or award given to them, the most successful professors were those whom made the types of choices that lead to their success. Ultimately, the professors chose to influence (as much as they could) the influences on their teaching by learning what it meant for them to be a teacher at MSU, using the available assessments to prove and improve their teaching, and then accepting that teaching recognition was more important than the form it took.

# CHAPTER FIVE: IMPLICATIONS FOR PRACTICE AND RESEARCH

## Introduction

To be clear, Dr. Jacobs "didn't *necessarily* want to teach at a big research university because [she] has ideas of what that means…that it didn't align with how [she] values teaching." When asked a follow-up question about "what that means," Dr. Jacobs talked about the big class sizes, bigger research expectations, and not wanting to feel like a failure as a teacher. Perhaps more than any of the other 14 professors I interviewed, Dr. Jacobs did not hold back her emotions (crying when recalling being nominated for the Teacher-Scholar Award) or opinions (threatening to leave the university if she did not get tenure because she "cares about [her] teaching"). Dr. Jacobs knew how important her research was to MSU, but also knew how important teaching was, too (to herself, her students and even the university).

Dr. Jacobs may not have liked the expectations MSU placed on her teaching, but any animosity she may have had for the university was somewhat mitigated by the love she has for teaching. As Dr. Jacobs put it,

I think that you hear all these messages and they work on you in your brain. But I also know in my heart that it doesn't matter as much to me as the other stuff does. And so, if I can't be successful in this system, doing the thing I care about, then I don't want to be successful in the system.

For Dr. Jacobs, being a "successful" professor at MSU involved battles between the individual and their environment, the head and the heart, research and teaching, and what one does and what others seem them do. Dr. Jacobs cried when talking about being nominated for the Teacher-Scholar Award because she felt recognized for her "pretty isolating" work in the classroom, and appreciated just having her work noticed.

Ultimately, amidst all the internal and environmental struggles Dr. Jacobs had with MSU's research expectations and her teaching expectations, she just wanted to be recognized for her excellence in both (especially as a teacher). And that Dr. Jacobs often felt her teaching went both unnoticed and unrecognized is why she cried when reflecting on her nomination. Dr. Jacobs did not necessarily need to be recognized for all her work as a teacher, but in an environment that she felt mainly focused on – and rewarded – her research, such attention was as appreciated as it was deserved.

## Summary of Major Findings

From the very beginning, this study has been about professors at MSU, and the influences on their teaching. Whether impacts are big or small, beneficial or detrimental, personal or professional, intrinsic or extrinsic, the goal was to better understand how a professor's teaching was affected by the environments (campus, classrooms, or conference rooms) around them, by the interactions with those individuals and environments, and, ultimately, by the choices the professors made about their teaching – and themselves – as they navigated the accompanying expectations. The purpose of this final chapter is to provide a summary of my major findings, address my research questions, offer a series of implications and recommendations from my research, suggest future research possibilities, and conclude with a synopsis of the entire study I conducted.

In a study ostensibly about teaching, much of it revolved around learning. The study was about professors at MSU talking about the experiences that prepared them to teach at a research university, how they navigated learning how teach at MSU amidst the accompanying expectations, assessments, and realizations, and how they learned to make certain choices about their time, teaching, and themselves. Bronfenbrenner and Morris (2006) stated that "development

is a function of forces emanating from multiple settings and from the relations among these settings" (p. 817). Additionally, "Understanding how teachers come to know what they know is a complex and multifaceted endeavor" (Horn, 2010, p. 227). Dr. Lawrence, in talking about his students learning and developing, inadvertently explained how professors do the same as teachers: "What it means to actually become an expert learner is to know what you don't know and know how to develop the resources to know it." Many of the conversations I had with the 15 professors and much of what I found existed in that distance between what a professor did not know as a teacher, how the professors came to understand what they needed to learn to develop as teachers, and, ultimately, how they created, acquired, or befriended the necessary and beneficial resources.

I found that the majority (12 out of 15 professors) wanted to teach at MSU because they wanted to work at a research university and teaching was, as Dr. Dalton said, "part of the gig." I found that the best preparation to teach at a research university was previous faculty experience (even the professors with the most prodigious graduate school experience still felt unready to teach at MSU), and that the most useful teaching resources were questions asked of their students and trusted peers. None of the 15 professors mentioned utilizing the available teaching resources or offices available to them on the MSU campus. I found that the individual – and often informal – class conversations the professors had with their students throughout a semester were more beneficial, relevant, and applicable that the feedback provided via the SIRS after a semester. And I found that not all recognition has to come in the form of an award in order to be rewarding, as many of the professors spoke about the value of being recognized for their teaching (Dr. Jacobs, in particular, broke down in tears as the topic was broached), and even appreciated the opportunity our interviews provided to be reflective about their work.

A professor's actions tended to be a product of the interactions with their environment; utilizing and amplifying what was available and applicable (like peers they trusted or student feedback they employed), but also replacing or even creating what was deficient, ineffective, or non-existent (like asking their peers for teaching assistance or using student feedback to better their class). A professor's teaching did not develop as a product of training formal training they received (in graduate school or upon arriving to MSU), they could not rely solely on the SIRS to provide them relevant or applicable feedback on their teaching, and were not always provided opportunities or arenas conducive to genuinely talk about and reflect on their teaching. When asked for an example of a time when they felt their teaching was not valued, Dr. Jacobs reflected on her evaluation meetings and how little time was allotted to talk about their teaching: "It makes it feel like it's not valued, because then why wouldn't someone want to talk to you about that?" In response to what the professors were not provided to further develop their teaching, that is why they took it upon themselves to find peers they trusted and respected to talk about and observe each other's teaching, to create assessment tools that gauge their teaching and their students' learning, and to find what Dr. Jacobs called "pockets and people" that value teaching at MSU. In many ways, and reflected and repeated throughout the 15 interviews, was how a professor's teaching tended to develop in relation to the responsibility they took to develop it themselves.

That a professor's teaching would be treated as secondary to their research at a research university is not necessarily surprising, given their focus, history, and accompanying literature. From an institution's perspective, the "presumption of a benefit to teaching from research activity permits heavy emphasis by faculty and administrators on the importance of research" (Fairweather, 1996, p. 111), which can create and perpetuate an environment where "good teaching is assumed, not rewarded" (Boyer, 2016, p. 82). The literature emphasized the

91

importance a research university places on a professor's research (and the assumptions it also makes about its beneficial effects on a professor's teaching), and the 15 interviews reinforced the numerous and consistent institutional messages they received about the value of their research. Yet, the professors (like Dr. Brand and Dr. Kotz) also acknowledged how much MSU cares about their teaching, too. So, rather than position a professor's research and teaching against each other, the major findings reveal that it is more appropriate – and in line with the interviews – to position them as coexisting pragmatically (with some overlap and influence on the other, but without enough to make the two adversarial against the other). The 15 professors may not have always appreciated the emphasis MSU placed on their research, but nor did any of them directly identify that as an impediment to the development of their teaching.

In addition to the coexisting nature of a professor's research and teaching, consistent throughout the major findings was the process through which the 15 professors describing learning and developing as teachers at MSU. As Hativa, Barak, and Simhi (2001) explained, "university professors, not having received any systematic preparation for their teaching role, gain beliefs and knowledge about good pedagogy through trial-and-error in their work, reflection on student feedback, and by using self-evaluation" (p. 700). Echoing the literature, the professors sometimes struggled as they learned to teach (Dr. Edison said, "My first semester taught me that I was just really woefully underprepared" and Dr. Dalton called their "first semester teaching just a complete shitshow"), generated student feedback as a way to gauge their teaching and learning, and relied on peers they respected and trusted to help evaluate their teaching. Ultimately, the best resource for a professor's development as a teacher was their classroom teaching; Schon (1983) referred to this as "knowing-in-action" because "it seems right to say that our knowing is in our action" (p. 43). And for as much as the professors may not have always liked the process of

learning how to teach, none complained about the act of teaching itself. In line with the literature about the benefits of teaching (Ambrose, 2010; Banner & Cannon, 1997; Grove, 2017; Guskin, 1994; Mellow, et al., 2015; Rose, 2014), the professors credited their classroom interactions – regardless of their size or volume – with placing value and recognition on their teaching (Dr. Owens used a student's thankfulness toward their teaching as "really showing me that what I've done is valued"). Amidst a larger institutional environment that may not have always prioritized or valued a professor's teaching as much as their research, the professors often sought out that recognition and found it (especially by interacting with their students). Consistent throughout my major findings and my interviews was how the professors reacted to what their environments may not have provided them (training and recognition) by finding it themselves within those same environments.

A potential critique or limitation of my research is that I only interviewed professors who had won MSU's Teacher-Scholar Award, so any recommendation for more and/or different forms of teaching recognition may be prejudiced by the award the 15 professors had already received. What would other professors at MSU – who have not been rewarded with a similar award from the university – say about the importance of being recognized for their work as teachers? As Dr. North explained, "Teaching is a job that you don't get as much recognition for. It's a big research university, you get a grant, and everyone hoorays. If you're a good teacher, you're just doing your job." The 15 professors I interviewed have all been recognized by MSU (a "big research university") for being "good teachers," yet they all downplayed the award's effects on their teaching and pointed to smaller, informal, and more personal interactions (like student thank you notes) as being more rewarding forms of interaction. Would other, non-award-winning professors at MSU say the same things about the most influential forms of teaching recognition

93

they receive? Or is it easier to look for smaller forms of recognition to reinforce "the sense of accomplishment of a job well done" (Hativa, 1995, p. 405) after a professor has already been recognized for their work by the large university? My research showed of a professor being recognized for their teaching is more important than the form that recognition takes, but did so through the perspective of 15 professors who had all won a prestigious teaching award from MSU. It is fair to question – and even critique – if that same perspective would be shared by the other professors at MSU who have not been recognized on such a large scale by the university.

## Response to Research Questions

The study findings answer the research questions of the study, which I designed to examine the influences on a professor's teaching at a research university. These research questions were:

1. How do professors at a research university understand and explain the factors that have influenced their teaching?

2. What are the most influential factors that affect a professor's teaching at a research institution?

The findings show that the 15 professors at MSU clearly understood and explained the factors that have influenced their teaching. The influential factors were as copious as they were complex, as the professors described how their teaching had been affected by the lack of teacher training or previous experience, sometimes obfuscated by the importance placed on their research, developed through experience, self-assessment, and reflection, and supported by peers they trusted and respected. The findings illustrate how the professors often took steps to develop as teachers in response to their environments not appropriately or completely effectively supporting and furthering their teaching.

**Research University Professors Understanding and Explaining the Factors That Have Influenced Their Teaching**

Throughout the 15 interviews, the professors clearly and consistently expressed how they understood and explained the factors that have influenced their teaching at MSU. While none of the 15 professors had the exact same teaching background, training, experiences, or perspectives, the interviews did tend to revolve around similar topics and themes. The 15 professors spoke about navigating the process of learning how to teach at a research university, how they used assessment as a tool for both proving and improving their teaching, the importance they placed on being recognized for their work, and, ultimately, why and how they choose to prioritize their teaching in environments and amidst individuals that may not always do the same. As Dr. Dalton put it, in "Teaching, the pressure is essentially entirely local." Consistent through my interviews and throughout my major findings was the responsibility the individual professors placed upon themselves to develop as teachers.

The 15 professors talked about not feeling prepared to teach prior to their first semester at MSU (unless they had previously been a faculty member at another research university), how little the university did to prepare them as teachers, and how challenging their first semesters tended to be as they learned how to teach. The 15 professors coupled MSU's lack of attention to their teaching with the university's overemphasis on a professor's research. Dr. Lawrence recalled "the very first meeting that I went to as a new hire was *about* research and what gets people tenure" and Dr. Armstrong has been "told to prioritize research every step along the way." An institution may say they value a professor's research and teaching, but Fairweather (2008) encouraged professors to "take their cues about what their institutions value by looking at salary and promotion and tenure decisions rather than the rhetoric about or evidence in support

of good teaching" (p. 24). At the same time, the professors understood the emphasis a research university places on their research. As Dr. Camden explained, "you sort of expect that to be true at a very high active research university. That's what we signed up for." In aiming to answer my primary research question about the factors that have influenced a professor's teaching, understanding the clear prioritization MSU places on a professor's research is fundamental because many the messages the professors received about their teaching (from the colleges, departments, evaluations, and peers) were just like their answers to why they wanted to teach at a research university: almost all of them began with an emphasis on their research.

Many of the professors remembered how the constant messages about the importance of their research lead to feeling forced to choose how and where to spend their time at MSU. In other words, a professor should allot teaching as much time as it takes them to be good enough at it (or, to use Dr. Dalton's wording, "you should be investing enough time to not be bad at teaching") and they should spend the rest of their time on their research. When Dr. Dalton's response is contextualized within the other introductory institutional messages the professors heard about the importance of their research, it is easy to understand why so many of the professors felt so much pressure to focus so much of their time on their research (instead of their teaching, or any of their responsibilities). For Dr. Camden, the responsibility was in the individual professor, and their ability – and responsibility – to properly manage their time. But for Dr. Dalton, and many of his peers, navigating their responsibilities was more subjective, and a product of understanding how much time was necessarily to accomplish each task sufficiently. The issue for the professors may have been the emphasis placed on their research, but its influence of their teaching was more indirect (though still constant), and more a product of the professors learning how to effectively fill all of their responsibilities. A professor's research did

not necessarily affect their teaching, so much as how much time it took to meet – and hopefully exceed – MSU's expectations influenced how much time they had left to teach at a suitable level.

**The Most Influential Factors That Affect a Professor's Teaching at a Research Institution**

A byproduct of MSU's high expectations and comparatively low support of a professor's research was that the professors often had to rely on themselves, their peers, and their students to develop as teachers. All 15 of the professors mentioned the new faculty orientation they went through before their first semester at MSU, but recalled hearing more about the effects of teaching (evaluations and tenure) or what may affect their teaching (campus resources and D2L), than how to effectively teach. The impact of MSU orienting teaching like this for new professors was compounded by how little teaching training and preparation many of the professors received prior to coming to MSU. As Dr. Matthews explained, "Academia is a somewhat unusual field. For a large part of the job, you received no training in." The tension between a professor's teaching preparation and expectations was reflected throughout the interviews. The lack of previous teaching experience and preparation was compounded by the little teacher training the professors received before starting their first semesters at MSU. How the professors were hired and trained to teach was an institutional factor that directly affect a professor's teaching because MSU expected them to spend a lot of their time doing something many had never done before.

Over time and with experience, the messages about where and how professors should focus their time did not dissipate, they just changed (and, in some ways, only increased). The messages the professors received about prioritizing their research transformed into reminders about who gets promoted and tenured at a research university. Dr. Camden provided an incisive decision-making framework for professors to use: "No one's going to get tenured here at MSU because they're a great teacher. You can't get through tenure with a mediocre research record,

97

you easily get tenure with a mediocre teaching record." When the professors spoke about their time and how to prioritize their responsibilities, MSU's tenure process was yet another example of an institutional factor influencing their teaching because the professors understood the importance of their research output and publications. The 15 professors understood and explained the pervasive influence of what was expected of them as a researcher, and how their teaching was consistently positioned by the university as secondary to their research.

Though the professors tended to find much of the MSU environment full of messages about the importance of their research that indirectly affected their teaching, the classroom was where the professors found the most direct and influential factors that affected their teaching (both positively and negatively). Beyond the "warm and fuzzy" (Dr. Matthews) feelings generated by personal interactions with their students, the professors also used the classroom as a way to prove and improve their teaching. The professors thought the SIRS had its shortcomings (both in terms of what it captured and when it was administered), so many of the professors took it upon themselves to generate student feedback about their teaching throughout the semester to assess both student learning and the effectiveness of their teaching. Dr. Armstrong asked his students to "just give me some feedback, because I want to do a better job. And if I'm not doing that…I can't see myself from outside. So, give me that feedback." The 15 professors used their assessments (as well as tests and assignments) to impact what was being taught (rather than what had already been taught) because they "need to figure out how to make things work for [students] better if things aren't working for them" (Dr. Lawrence). For as much as the professors bemoaned the SIRS, many created additional assessment tools to understand their teaching, gauge its effectiveness, and adjust accordingly to the needs of their students. Of all the factors that influenced a professor's teaching, it is appropriate that the students (who were most

98

directly impacted by their professor's teaching) would then be the ones to have the most impact on their professor's teaching.

At the same time, not all of the feedback provided by the students was useful, applicable, or even relevant to a professor's teaching. MSU used the SIRS as a way to "provide an accurate account of student response to their instructional practices" (Michigan State University, 2018), but some of the 15 professors criticized a tool that allowed superficial and personal critiques to double as pedagogical ones. In response to a SIRS that said she was "the worst professor [a student] ever had and she has no business being at this university," Dr. North wondered, "What do you do with that? There's no way of knowing *why* they thought you were crap professor. Dr. Brand mentioned having to "weed out what's really important and what's really just venting" in order to get to the feedback that was useful and applicable to his teaching (rather than just a personal attack on something a student had not liked from class). That Dr. Kotz was "deluded by good evaluations," Dr. Camden learned how to "put [my] thumb on the scale so [I] get the values [I] want," or Dr. Dalton eventually got to the point in his career where the negative feedback "doesn't get under my skin liked it used to" because "I'm too busy and tired to give a crap" is more commentary on the shortcomings of the assessment tool being used than the professors being assessed by it. The SIRS was limited in how it captured what a professor did in their classroom, so the feedback it generated became equally limited, too, and necessitated professors seeking out – and even creating – additional way to generate better and more applicable feedback about their teaching.

As seen throughout the 15 interviews, the professors were surrounded at MSU by institutional factors that affected their teaching from their very first day on the job. Whether it was in their new faculty orientation, evaluation meetings, or throughout the tenure process, a

99

professor was told to prioritize their research over their teaching (both were important, but not equally). Even the prestigious Teacher-Scholar Award could not fully separate a professor's research from their teaching, serving as further evidence of MSU's inextricable link between the two. Yet where the professors tended to be perceived – and rewarded – as scholars who also taught outside the classroom, they became teachers of scholarship within it (as if their doorways doubled as transformative thresholds). The classrooms provided both sanctuary and opportunity, where the students could learn, improve, and provide feedback and the professors could teach, improve, and receive feedback. A professor's teaching could be as influenced by their students as they encouraged and allowed it to be, with many of the 15 professors treating student feedback as an ongoing conversation to improve their teaching. In taking the time to ask their students questions about their teaching, the professors ultimately answered my research questions, too, as it was the answers their students provided (via feedback, tests, and assignments) that were the most influential factors on a professor's teaching.

**Implications and Recommendations for Research Institutions**

A research university, given its title, make its priority to its professors very clear. But the rest of a professor's responsibilities, especially, teaching, can become unclear – and even unrealistic – when so much of the focus is given to its research. The biggest implication is for research institutions to position themselves as more than just place where their professors do research. In response to being asked why they wanted to teach at a research university, 12 of the professors answered by talking about their research (the remaining three professors began their answers by talking about their teaching, before eventually mentioning their research, too). That all of the professors answered a question about their teaching by eventually referencing their research is not necessarily surprising, as their answers reflected how immediate and omnipresent

100

research is to them as professors (even in response to a question about their teaching). Research is why many of the professors wanted to work at MSU, and research is often messaged to them as the most important thing they do at MSU. Yet, the cost of such a consistent institutional emphasis on a professor's research can generate uncertainty about their teaching, and where it should fit between MSU expectations of their professors and the professor's expectations of themselves (and of MSU, too).

Of all the questions I asked throughout my 15 interviews, it was the one asking the professors about how they received feedback about their teaching that generated the most immediate and visceral responses. The consternation mainly revolved around the SIRS (which MSU administers at the conclusion of each semester), specifically its inability to actually measure a professor's teaching coupled with the university's reliance on it to do just that. In response the perceived ineffectiveness of the SIRS, many of the professors created informal ways of generating feedback about their teaching (some professors were told to do this at the mid-semester, but were not given parameters regarding questions to ask). Rather than wait until after the semester was over to read what the students said about the class in the SIRS, some of the professors took it upon themselves to collect the student feedback and then immediately apply it to what they were doing in class. The professors administered their own forms of assessment to better themselves as teachers, to improve their students' learning, and to supplement a SIRS they did not feel effectively do the same.

If the implication is that research universities do not sufficiently assess and generate feedback (in a timely manner) about a professor's teaching, then it is recommended that the university upscale and formalize the processes and procedures the professors are already using to assess and develop their teaching. The 15 professors mentioned assessment activities they

101

incorporated into their classes (beyond the grades derived from the exams and papers they assigned throughout the semester), often asking for feedback (from their peers about teaching and from their students about learning) as a way to self-assess and, if needed, self-correct, along the way. Neither referring to peers nor doing ongoing assessments were necessarily required (some professors mentioned being told to do mid-semester assessment, but none of the 15 professors mentioned the form it had to take or questions they had to ask), but they still did them, and both would be beneficial additions to practice. Beyond just asking them what a professor did in the classroom or reviewing their SIRS scores, asking professors more reflective questions that encourage them to explain why they taught what and how they did in the classroom. If many of the professors are already informally collecting this type of information from their students to better inform their teaching, then MSU could be using it to better understand a professor's teaching, too.

My second recommendation for research universities is about recognizing the work their professors do as teachers. Recognition was why Dr. Jacobs cried as she reflected on being nominated for the Teacher-Scholar Award, it was why Dr. Lawrence referred to our interview as "cathartic" at its conclusion, and it was why so many other professors spoke about how winning the Teacher-Scholar Award changed how their teaching was viewed more than it changed their actual teaching (Dr. Jacobs cried over being nominated for it, not actually winning it). Dr. Isaac referred to the award as "symbolic capital," implying both the value and scarcity of similar teaching recognition. Dr. North explained, "Teaching is a job that you don't get as much recognition for," which acknowledges there is some recognition for their teaching, but not enough. Dr. Jacobs revisited the recognition topic later in her interview, when using their evaluation meetings as an example of a time when they felt their teaching was not valued,

102

If you're doing good, it's like a checkbox, and then move on. As opposed to, "Oh,

let's talk about how good this is." And when you spend a lot of time in it, that

actually is the opposite. It makes it feel like it's not valued, because then why

wouldn't someone want to talk to you about that? Especially in the one half-hour

you get to actually talk about what you do.

As evidenced throughout the 15 interviews, recognizing a professor's teaching is more important

than the form it took, and could be accomplished by adding more reflective questions into the

evaluation process. Why was it important to teach that way? What did their students learn and

how did they know? What did the professors learn as teachers and what did they learn about their

teaching throughout the semester? Why will they teach similarly or differently their next

semester? Not every professor can win an award, but a research university can better recognize a

professor's teaching by acknowledging it more personally, qualitatively, reflectively, and

meaningfully in the evaluation process. Teaching is an important part of a professor's job

description, but if they do not feel recognized for the work they do as teachers, then that any

importance can be brought into question.

Both recommendations are rooted in professors providing teaching feedback and

recognition for themselves because their environment does not provide it for them. If the 15

professors did not collect student feedback or were not reflective about their teaching, it is

uncertain where – or if – they would otherwise receive that information about their teaching. The

professors created their own tools because they did not otherwise exist in a manner that was

conducive to their development as teachers. By formalizing the ongoing feedback many

professors already collect throughout a semester and by adding more reflective questions to the

evaluation process, then a research university can support and recognize teaching in a way they do not sufficiently do so now (otherwise the professors would have to work to fill this gap).

## Implications and Recommendations for Faculty Developers

Given how little the 15 professors utilized the available campus resources to further develop their teaching, and the tools and techniques they created (like generating ongoing student feedback throughout the semesters) instead, the implication for faculty developers is that there are better ways to meet the pedagogical needs of their professors. Faculty development can be a "key lever for change in higher education institutions" (Beach, et al., 2016, p. 145), but, as Palmer (1998) premised, "Good teaching cannot be reduced to technique; good teaching comes from the identity and integrity of the teacher" (p. 10). The implication is that while faculty development has the potential to affect a professor's teaching, it becomes a missed opportunity when not utilized.

The 15 professors knew the teaching resources and offices available to them on the MSU campus, but the potential helpfulness and effectiveness of things like the new faculty orientation or departmental peer mentoring was predicated on their usage by the professors. When asked about not using the available resources, the professors' responses ranged from thinking the content covered in the new faculty orientation was not relevant to their teaching, explaining how the campus resources, offices, and offerings were meant for professors that were "baseline teachers" who "had no idea what they were doing" (Dr. Dalton), or not even asking for help in the first place because the professors "didn't want to give my colleagues the impression that I didn't know what to do" (Dr. Kotz). According to the literature, many professors perceive their participation in such learning opportunities to be an "indication of their shortcoming that require attention and active correction" (Condon, et al., 2015, p.1) and the 15 interviews reinforced that

perception from the professors, even if it did not align with the teaching needs of the professors. The professors were in need of teaching help, but did not want or use what was offered to them by MSU. The issue was not the availability of teaching assistance or resources at MSU but, rather, its usefulness, as the professors did not think the offerings were considered relevant, applicable, and helpful to the development of their teaching.

If "institutional policies and practices should encourage faculty members to improve on existing teaching methods and skills or to acquire new ones" (Braxton, Hirschy, & McClendon, 2004, P. 70), then the first recommendation is design and provide resources professors would actually use to develop their teaching. A critique of one-size-fits-all top-down approaches is that they ignore a professor's existing knowledge and expertise (Henderson & Dancy, 2008), so the recommendation is to create teaching resources that can be adapted and applied to meet the needs of individual professors. Whether it be encouraging departments to take time in meetings to discuss teaching, suggesting professors connect with peers (as seen throughout the interviews), or replacing the most experienced peer mentor teachers with more skilled ones, the recommendation is create departmental environments that are supportive of, conducive, and open to conversations about teacher development. Rather than offering campus-wide resources that have to be broad in order to meet every professor's needs, there would be a benefit to supporting individual colleges and departments to meet their specific needs, support their professors, and provide learning opportunities that are more relevant and applicable to their needs.

More than the importance of providing the proper training and assistance is the value of creating an environment where talking about teaching is recognized, supported, and cultivated to ubiquity. There are opportunities to integrate meaningful and reflective conversations about a professor's teaching throughout their time at MSU: as part of the hiring process, during annual

reviews and evaluations, as topics on departmental meeting agendas, and even informally with their peers (after class, over coffee, or via email). The different situations are likely to elicit different types of conversations about one's teaching (an interviewer may ask broader questions about a professor's teaching philosophy or a peer may ask how similar content was taught in the same class during a previous semester), which would integrate teaching throughout a professor's MSU environment (rather than relegating it to their classrooms or evaluation meetings). If professors talked about their teaching with everyone everywhere they went, then they might feel more supported in everything (not just their research) they did as a professor at MSU.

In addition to multiplying the places where professors are encouraged to talk about their teaching, how they should talk about their teaching is of equal importance, too. Many of the 15 professors talked about their inexperience and lack of preparation as teachers, but were hesitant to ask for help because they did not want to be perceived as not knowing enough, did not think the campus resources would be beneficial to their teaching, or did not want to take time away from their other professional and personal responsibilities. There was a need amongst the professors to develop as teachers, but not a usage of the available campus resources designed to meet that need.

Beyond creating more environments for professors to talk about teaching, MSU can also add prescribed content to make the conversations more reflective and meaningful (departmental meetings can include examples of best teaching practices and ones that could have gone better and peers can be encouraged to talk about how their teaching has developed over time), so that they capture the entire process of learning how to develop as a teacher (rather than just the highlights, which may create unrealistic expectations and be counterproductive to individuals who may be struggling in their classroom). By asking better and more reflective questions, it

106

help the professors better understand the help they need as teachers and encourage them to be more proactive about seeking it out. Maybe the professors will turn to the available campus resources, or to their peers, or somewhere or someone else for help; but that the professors may benefit from a broadened definition of the available "teaching resources" would be more important than whether or not they only use the ones available to them on the MSU campus. That a professor would get and use the teaching help should encourage faculty developers to create additional resources that are not bound by perception or location, and can be used by professors to better understand themselves, their teaching, and their needs before seeking out the appropriate and available resources.

## Implications and Recommendations for Faculty

Given the implications for research universities and faculty developers, and the recommendations for both to better assess, recognize, and develop a professor's teaching, the implication is that can leave a lot of pressure and responsibility on individual professors to meet those assessment, recognition, and development needs themselves. Bronfenbrenner's model focuses on the interactions between the individual and their environment, positioning one's development as an evolving process of that interaction (Bronfenbrenner, 1993, p. 4), and the production of "lasting change in the way in which a person perceives and deals with their environment" (Bronfenbrenner, 1979, p. 3). And given that "teaching is an extended process that unfolds over time" (Shulman, 1996, p. 5), one never really stops learning how to teach, as the process may unfold over the entirety of one's career (rather than over a specific timeframe) and will be specific to the individual professor. So, a professor is often in the position of both learning how to be a teacher and what it means to be one at a research university.

While no two of the 15 professors needed the same help at the same time in their careers, there was some consistency regarding what the professors needed help with over time as they learned to become teachers. As Dr. North said in her interview, "The content is not the hurdle. I know the [subject], that's what I'm trained to do." While Dr. North's comment can be used to reinforce a literary critique of professors, as "expertise in a field is not equal to or synonymous with the ability to use and share that expertise for the instruction of students" (Kezar & Maxey, 2016, p. 108), it can also be interpreted as a reflection of the complex nature of everything else – beyond the content – that goes into teaching at a research university. Dr. Brand said, "Teaching preparation takes a long time. And because this is a research institution, you have to put limits to it. There are other things that are expected of me to be done every single week." For as much of teaching that is conceptualizing as taking place in a classroom, there are many "other things" beyond a professor's classroom that take up a lot of their time, too: class preparation, grading, research, service, family, health, and so many other responsibilities that may not be directly related to one's teaching, but can certainly affect it. As evidenced throughout the 15 interviews, learning how to be a teacher meant understanding and accepting where a professor's teaching fits into their other responsibilities and how to be good enough at all of them.

The first recommendation is to ensure new faculty are told how much goes into learning how to be a teacher (both inside and outside of one's classroom) by respected peers in their colleges or departments (which may also help address any potential hesitation toward eventually asking for help, too). For as much as the 15 professors heard about the importance of research during their new faculty orientation and initial departmental meetings, official university meetings may not be a reliable source for an in-depth conversation about one's teaching, the challenges of learning how to be one, and where a professor's teaching fits into their overall job

description (as it relates to their other responsibilities being mentioned and how to manage one's time). That the conversations are formal or informal are not as important as them taking place, as it is unclear where else a professor would get insight and advice about what it really means to be a teacher at a research university, how to manage one's time, and how to do so in a way that is sustainable and successful. Such peer-to-peer conversations about teaching may happen in time (as evidenced by how many times Dr. Lawrence was mentioned throughout the 15 interviews, especially from Dr. Jacobs), but they can – and should – be expedited, too. Learning how to be a teacher may be just as complicated as teaching, with both issues often exacerbated by not proactively addressing them early in a professor's career.

The second recommendation for professors to reflect on what it means to them to be a teacher at a research university. When many of the professors began teaching, they talked about their inexperience and lack of preparation, and how they worked to overcome both. At the beginning of their career, Dr. Edison referred to teaching as "something I need to do to keep this job," but that utilitarian approach to teaching changed over time as the teaching itself became more rote. Dr. Dalton "came to appreciate that the teaching that I was doing was going to have more of an impact, globally, on people than the research that I was doing." Similarly, Dr. Kotz said, "I love it because you feel like you are impacting people directly and it gets me to think." When the 15 professors were asked about a time when they felt their teaching was valued, most of them talked about their students, and the validation they received from even the smallest and simplest interactions. For as many mixed messages as a professor may receive about their teaching outside the classroom, inside of it is where they tended to find the most value and meaning. Yet, to hear Dr. Lawrence refer to our interview as "cathartic" and to be thanked by others for the interview conversations, makes me wonder how often professors take the time to

109

think about their teaching in an appreciative way and to understand the impact they are having on their students (and, in turn, the impact their students have on them, too).

The recommendations for faculty to utilize their peers as resources to understand what it really means to be a teacher at a research university and to practice self-reflection as a way to generate meaning about one's teaching are much harder to standardize than the previous recommendations because of their subjectivity. Both recommendations require the professors to know themselves well enough to know when they are in need of help and where they can get that help from. But, at the same time, so many of the 15 professors eventually came to the same conclusions (about asking for help and finding meaning in what they do), and I wonder if the professors would have reached them sooner had they been encouraged to do so.

**Implications for Future Research**

I did not have a question about care on my interview protocol because I felt it was too leading and that it implied a certain feeling about one's teaching that a professor may not necessarily have. But it is a topic that sometimes came up during the interviews, often as a professor provided an example of a teaching technique that went far beyond what was required (like Dr. Lawrence giving students their exams back, correcting their mistakes, and writing a paragraph for each to explain what they would have needed to get it right the first time) as a way to better student learning and how the students were taught. In response to being asked they cared so much about their students, Dr. Lawrence told a very personal story from his childhood and lessons a relative taught them at a very young age. Lessons that were still relevant to them as a teacher and were the root of their caring approach to teaching as a professor. Dr. Lawrence was not the only professor to mention care in their interview, as Drs. Armstrong, Houston, Matthews,

and Owens also related the importance of their teaching to personally meaningful stories and lessons from their childhood.

Not all professors may care about teaching the same way Drs. Armstrong, Lawrence, and Matthews do, but nor were the 12 other professors asked the same question because that was not necessarily the focus of my study. But grounding a future study about professors and their care for their teaching would be a natural progression from this study about the influences on a professor's teaching. Many of my recommendations revolve around professors seeking a better understanding of their teaching and how to care about their teaching and its effects (on their students, but especially themselves), without directly asking about how they care about their teaching. Further work would be more direct, and investigate how professors develop, explain, and express the care they have for their teaching.

## Closing Summary

In this chapter I discussed how professors at research universities do not have their teaching sufficiently supported by the current institutional structures in place, and how they often have to seek out or create resources to develop as teachers. I discussed the implications of my study in relation to how research universities, faculty developers, and the individual professors can all be doing more to better serve and support a professor's teaching. I argue how research universities can better assess and recognize teaching, how faculty developers can localize their available resources to the individual colleges and departments, and how the professors can utilize their peers and self-reflection as a way to meet their needs and expectations as teachers. Much of what many professors are already doing to develop as teachers can be upscaled and standardized so that everyone can benefit and develop from the tools and techniques currently being used by just a handful of professors. The professors create tools and techniques to provide the type of

feedback, assessment, and recognition they want and need as teachers, all of which can be

provided by the universities instead. In a study about the influences on a professor's teaching at a

research university, that the professors often had to create additional resources to supplement

what they did not receive from the institution is unfortunate and avoidable.

APPENDICES

APPENDIX A: Pre-Interview Protocol

1. How did your PhD program prepare you to teach? What messages and training did you receive about teaching as a professor?

2. How prepared did you feel to teach on your first day of class at MSU? What did MSU do to prepare you to teach? What did you to do prepare to teach?

3. Describe your first semester teaching at MSU. What kinds of things were you thinking about? What aspects of teaching took up the most time? How did your teaching change as the semester progressed? Why did you make those changes?

4. Describe your most recent semester teaching at MSU. How does your most recent semester compare to your first semester teaching at MSU? What is the biggest change you have made to your teaching in that time?

5. How did winning the Teacher-Scholar award affect your teaching? What changed? What stayed the same?

APPENDIX B: Interview Protocol

*As you know, my study is focused on how professors at a research university understand and explain the factors that have influenced their teaching. Thus, this interview will revolve around questions about your time teaching (at MSU, as well as other institutions you have taught at in the past).*

- *How long have you taught @ MSU?*

    o *If you taught prior to MSU, how long did you teach for?*

1. Why did you want to teach at a research university? What motivates you to keep teaching? How has that motivation changed over time?

2. How prepared did you feel to teach before you started at MSU? What happened during that time to make you feel this way?

3. Can you tell me about a time (before you starting teaching at MSU) that you feel prepared you to teach? What did MSU do to prepare you to teach?

    o *If you have taught at another institution previously, how did that experience prepare you to teach at MSU?*

4. Tell me about your first semester teaching at MSU. What kinds of things were you thinking about? What aspects of teaching took up the most time? How did your teaching change as the semester progressed? Why did you make those changes?

5. Tell me about your most recent semester teaching at MSU. What kinds of things were you thinking about? What aspects of teaching took up the most time? How does your most recent semester compare to your first semester teaching? What is the biggest change you have made to your teaching in that time?

6. How do you get feedback about your teaching? When? Why? From whom?

7. Where do you turn for help in teaching? What do you typically ask help for or about? Do you use any of the teaching services or resources MSU offers professors?

8. What role does technology play in your teaching? How has that changed over time? How has that changed your teaching over time?

9. How did winning the Teacher-Scholar award affect your approach to teaching? What changed? What stayed the same?

10. What messages have you received from the university and department about your teaching, research, and service responsibilities? Where do those messages align? Where do they not align? What effect(s) does their alignment have on your teaching? How did those messages change after winning the award?

11. Can you tell me about an interaction (in class, in a meeting, or elsewhere) you have had where you felt your teaching was valued? What happened to make you feel that way? Who was there? What were those messages? What effect did this interaction have on your teaching?

12. Can you tell me about an interaction (in class, in a meeting, or elsewhere) you have had where you felt your teaching was not valued? What happened to make you feel that way? Who was there? What were those messages? What effect did this interaction have on your teaching?

13. What has been your most impactful teaching experience in the classroom. What happened to make it so impactful? Why does that experience still resonate today?

APPENDIX C: Interview Codes and Themes

**Interview Codes**

1. Awards

2. Rewards

3. Peers

4. Department and university messages

5. Students

6. Assessments

7. Time, experience, and life

8. Scholarship

9. Teaching and learning

10. Motivation, care, and values

**Interview Themes**

1. Recognition is more important than the form it takes.

2. Using assessment as a tool for proving and improving teaching.

3. Research as a complement to a professor's teaching, not its competition.

4. Professors choosing to be better teachers.

# Michigan State University

# Student Instructional Rating System

*Your instructor hopes to use your thoughtful responses for the improvement of instruction. Please omit any of the items which do not pertain to the course that you are rating.*

**INSTRUCTIONS:**
*Please respond to the items using the following key:*

| | |
|---|---|
| S | SUPERIOR: Exceptionally good course or instructor |
| AA | ABOVE AVERAGE: Better than typical course or instructor |
| AV | AVERAGE:Typical of courses or instructors |
| BA | BELOW AVERAGE: Not as good as the typical course or instructor |
| I | INFERIOR: Exceptionally poor course or instructor |

                                                                S  AA AV BA  I

1. The instructor's enthusiasm when presenting course material  ○○ ○ ○ ○

2. The instructor's interest in teaching  ○○ ○ ○ ○

3. The instructor's use of examples of personal experiences to help get points across in class  ○○ ○ ○ ○

4. The instructor's concern with whether the students learned the material  ○○ ○ ○ ○

5. Your interest in learning the course material  ○○ ○ ○ ○

6. Your general attentiveness in class  ○○ ○ ○ ○

7. The course as an intellectual challenge  ○○ ○ ○ ○

8. Improvement in your competence in this area due to this course  ○○ ○ ○ ○

9. The instructor's encouragement to students to express opinions  ○○ ○ ○ ○

10. The instructor's receptiveness to new ideas and others' viewpoints  ○○ ○ ○ ○

11. The student's opportunity to ask questions  ○○ ○ ○ ○

12. The instructor's stimulation of class discussion  ○○ ○ ○ ○

13. The appropriateness of the amount of material the instructor attempted to cover  ○○ ○ ○ ○

14. The appropriateness of the pace at which the instructor attempted to cover the material  ○○ ○ ○ ○

15. The contribution of homework assignments to your understanding of the course material relative to the amount of time required  ○○ ○ ○ ○

16. The appropriateness of the difficulty of assigned reading topics  ○○ ○ ○ ○

17. The instructor's abilty to relate the course concepts in a systematic manner  ○○ ○ ○ ○

REFERENCES

REFERENCES

Airwood, B., Grimm, J., Buchanan, N. C. T., Nease, R., & Michigan State University. (2016). *To my professor: Student voices for great college teaching*. Canton, MI: Read the Sprit Books.

Alpert, D. (1985). Performance and paralysis: The organizational context of the American research university. *The Journal of Higher Education*, *56*(3), 241-281.

Ambrose, S. (2010). *How learning works: Seven research-based principles for smart teaching*. San Francisco, CA: Jossey-Bass.

Arum, R., & Roksa, J. (2011). *Academically adrift: Limited learning on college campuses*. Chicago, IL: The University of Chicago Press.

Association of Governing Boards (2013). *Top 10 strategic issues for boards, 2013 – 2014*. Washington, D. C.: AGB Press.

Astin, A. W. (1993). *What matters in college?: Four critical years revisited*. San Francisco, CA: Jossey-Bass.

Astin, A. W. (2016). *Are you smart enough?: How colleges' obsession with smartness shortchanges students.* Sterling, VA: Stylus Publishing.

Austin, A. E. (2002). Preparing the next generation of faculty: Graduate school as socialization to the academic career. *The Journal of Higher Education*, *73*(1), 94-122.

Bain, K. (2004). *What the best college teachers do*. Cambridge, MA: Harvard University Press.

Banner, J. M., & Cannon, H. C. (1997). *The elements of teaching*. New Haven, CT: Yale University Press.

Barr, R. B., & Tagg, J. (1995). From teaching to learning—A new paradigm for undergraduate education. *Change: The magazine of higher learning*, *27*(6), 12-26.

Bastedo, M. N. (2012). *The organization of higher education: Managing colleges for a new era*. Baltimore, MD: The Johns Hopkins University Press.

Beach, A. L., Sorcinelli, M. D., Austin, A. E., & Rivard, J. K. (2016). *Faculty development in the age of evidence: Current practices, future imperatives.* Sterling, VA: Stylus Publishing.

Berg, M., & Seeber, B. K. (2016). *The slow professor: Challenging the culture of speed in the academy*. Toronto, Canada: University of Toronto Press.

Bess, J. L. (1978). Anticipatory socialization of graduate students. *Research in Higher Education*, *8*(4), 289-317.

Beyer, C. H., Taylor, E., & Gillmore, G. M. (2013). *Inside the undergraduate teaching experience: The university of Washington's growth in faculty teaching study*. Albany, NY: State University of New York Press.

Birnbaum, R. (1988). *How colleges work: The cybernetics of academic organization and leadership*. San Francisco, CA: Jossey-Bass.

Bowen, W. G., & McPherson, M. S. (2016). *Lesson plan: An agenda for change in American higher education*. Princeton, NJ: Princeton University Press.

Boyer, E. L., In Moser, D., In Ream, T. C., & In Braxton, J. M. (2016). *Scholarship reconsidered: Priorities of the professoriate*. San Francisco, CA: Jossey-Bass.

Bronfenbrenner, U. (1979). The ecology of human development: Experiments by nature and design. Cambridge, MA: Harvard University Press.

Bronfenbrenner, U. (1993). The ecology of cognitive development: Research models and fugitive findings. In R. H. Wozniak & K. W. Fischer (Eds.), *Development in context: Acting and thinking in specific environments* (pp. 3–44). Hillsdale, NJ: Erlbaum.

Bronfenbrenner, U. (1995). Developmental ecology through space and time: A future perspective. In P. Moen & G. H. Elder, Jr., (Eds.), Examining lives in context: Perspectives on the ecology of human development (pp. 619–647). Washington, D. C.: American Psychological Association.

Bronfenbrenner, U. (Ed.). (2005). Making human beings human: Bioecological perspectives on human development. Thousand Oaks, CA: Sage.

Bronfenbrenner, U., & Morris, P. A. (2006). The bioecological model of human development. In W. Damon & R.M. Lerner (Eds.), *Handbook of child psychology* (6th ed.), 793 - 828. Hoboken, NJ: Wiley.

Brookfield, S. (1995). *Becoming a critically reflective teacher*. San Francisco, CA: Jossey-Bass.

Caplan, B. (2018). *The case against education: Why the education system is a waste of time and money*. Princeton, NJ: Princeton University Press.

Carey, K. (2016). *The end of college: Creating the future of learning and the university of everywhere*. New York, NY: Riverhead Books.

Chalmers, D. (2011). Progress and challenges to the recognition and reward of the scholarship of teaching in higher education. *Higher Education Research & Development*, *30*(1), 25-38.

Chickering, A., & Gamson, Z. (1987). Seven principles for good practice in undergraduate education. *AAHE Bulletin, 39*, 3–7.

Condon, W., Iverson, E. R., Manduca, C. A., Rutz, C., & Willett, G. (2016). *Faculty development and student learning: Assessing the connections*. Bloomington, IN: Indiana University Press.

Cook, C., & Kaplan, M. (2011). *Advancing the culture of teaching on campus: How a teaching center can make a difference*. Sterling, VA: Stylus Publishing.

Crimmel, H. H. (1984). The Myth of the Teacher-Scholar. *Liberal Education*, *70*(3), 183-98.

Crotty, M. (1998). *The foundations of social research*. London: Sage.

Cutten, G. B. (1958). The college professor as teacher. *School and Society*, *86*(2139), 372-375.

Dewey, J. (1952). *How we think*. New York, NY: Dossier Press.

Diamond, R.M. (1993). Changing priorities and the faculty reward system. *New Directions in Higher Education, 81*. San Francisco, CA: Jossey-Bass.

Dintersmith, T. (2018). *What schools could be: Insights and inspiration from teachers across America.* Princeton, NJ: Princeton University Press.

Eliot, C. W. (1969). *A turning point in higher education: The inaugural address of Charles William Eliot as president of Harvard College.* Cambridge, MA: Harvard University Press.

Fairweather, J. (1996). Faculty work and public trust: Restoring the value of teaching and public service in American academic life. Boston, MA: Allyn & Bacon.

Fairweather, J. (2005). Beyond the Rhetoric: Trends in the Relative Value of Teaching and Research in Faculty Salaries. *Journal of Higher Education (76),* 401-422.

Fairweather, J. (2008). Linking evidence and promising practices in science, technology, engineering, and mathematics (STEM) undergraduate education. *Board of Science Education, National Research Council, The National Academies, Washington, DC*.

Fairweather, J. S. (1997). The relative value of teaching and research. *The NEA 1997 almanac of higher education*, 43-62.

Fairweather, J. S. (1999). The highly productive faculty member: Confronting mythologies of faculty work. In W. G. Tierney (Ed.), *Faculty productivity: Facts, fictions, and issues* (pp. 55-98). New York, NY: Falmer.

Fairweather, J. S. (2002). The mythologies of faculty productivity: Implications for institutional policy and decision making. *The journal of higher education*, *73*(1), 26-48.

Fairweather, J. S., & Rhoads, R. A. (1995). Teaching and the faculty role: Enhancing the commitment to instruction in American colleges and universities. *Educational Evaluation and Policy Analysis*, *17*(2), 179-194.

Fairweather, J., & Beach, A. (2002). Variation in Faculty Work within Research Universities: Implications for State and Institutional Policy. *Review of Higher Education (26)*, 97-115.

Figlio, D. & Schapiro, M. (2017). Are great teachers poor scholars? *Evidence Speaks Reports, 2*(6). Washington, D.C.: The Brookings Press.

Finkel, D. L. (2000). *Teaching with your mouth shut*. Portsmouth, NH: Boynton/Cook Publishers, Inc.

Flick, U. (2014). Mapping the field. In U. Flick (Ed.), *The Sage handbook of qualitative data analysis* (p. 3 – 18). Thousand Oaks, CA: Sage.

Fox, M. F. (1992). Research, teaching, and publication productivity: Mutuality versus competition in academia. *Sociology of Education, (65)*, 293-305.

Friedrich, R. J., & Michalak Jr., S. J. (1983). Why doesn't research improve teaching? Some answers from a small liberal arts college. *The Journal of Higher Education*, *54*(2), 145-163.

Gappa, J. M., Austin, A. E., & Trice, A. G. (2007). *Rethinking faculty work*. San Francisco, CA: John Wiley & Sons.

Geiger, R. L. (1986). *To advance knowledge: The growth of American research universities, 1900-1940*. New York, NY: Oxford University Press.

Gmelch, W. H., Wilke, P. K., & Lovrich, N. P. (1986). Dimensions of stress among university faculty: Factor-analytic results from a national study. *Research in Higher Education*, *24*(3), 266-286.

Gonzales, L. D. & Terosky, A. L. (2014, April). *Legitimacy and the perils of same-ness: A study of faculty careers.* Paper presented at the annual meeting of the American Educational Research Association, Philadelphia, PA.

Graff, G. (2003). *Clueless in academe: How schooling obscures the life of the mind*. New Haven, CT: Yale University Press.

Grove, J. (2017). *THE teaching survey 2017: Results and analysis.* Retrieved from: https://www.timeshighereducation.com/features/the-teaching-survey-2017-results-and-analysis

Gumport, P.J., Iannozzi, M., Shaman, S., & Zemsky, R. (1997). *The United States country report: Trends in higher education from massification to post-massification*. Stanford, CA: Stanford University.

Guskin, A. E. (1994). Reducing student costs & enhancing student learning part II: Restructuring the role of faculty. *Change: The Magazine of Higher Learning*, *26*(5), 16-25.

Hacker, A., & Dreifus, C. (2011). *Higher education?: How colleges are wasting our money and failing our kids – and what we can do about it.* New York, NY: St. Martin's Griffin.

Hativa, N. (1995). The department-wide approach to improving faculty instruction in higher education: A qualitative evaluation. *Research in Higher Education, (36)*, 377- 413.

Hativa, N. (1997). *Teaching in a research university: Professors' conceptions, practices, and disciplinary differences*. Paper presented at the annual meeting of the American Educational Research Association, Chicago, IL.

Hativa, N. (2000a). Becoming a better teacher: A case of changing the pedagogical knowledge and beliefs of law professors. *Instructional science*, *28*(5), 491-523.

Hativa, N., Barak, R., & Simhi, E. (2001). Exemplary university teachers: Knowledge and beliefs regarding effective teaching dimensions and strategies. *The Journal of Higher Education*, *72*(6), 699-729.

Hearn, J. C. (1992). The teaching role of contemporary American higher education: Popular imagery and organizational reality. In W. E. Becker, Jr. & D. R. Lewis (Eds.), *The economics of American higher education* (pp. 17-68). Boston, MA: Kluwer.

Henderson, C., & Dancy, M. H. (2008). Physics faculty and educational researchers: Divergent expectations as barriers to the diffusion of innovations. *American Journal of Physics, 76*(1), 79–91.

Horn, I. S. (2010). Teaching replays, teaching rehearsals, and re-visions of practice: Learning from colleagues in a mathematics teacher community. *Teachers College Record, 112*(1), 225–259.

Huber, M. T. (2004). *Balancing acts: The scholarship of teaching and learning in academic careers.* Paper present at the annual meeting of the American Association for Higher Education and the Carnegie Foundation for the Advancement of Teaching, Washington, D.C.

Jencks, C., & Riesman, D. (1968). *The academic revolution*. Garden City, NY: Doubleday.

Keohane, N. O. (1993). The Mission of the Research University. *Daedalus*, *122*(4), 101–125.

Kezar, A. & Maxey, D. (2016). Envisioning the faculty for the 21st century: Moving to a mission-oriented and learner-centered model. New Brunswick, NJ: Rutgers University Press.

Kezar, A., & Maxey, D. (2014). Faculty matter: So why doesn't everyone think so? *Thought & Action*, 29-44.

Kline, M. (1977). *Why the professor can't teach.* New York, NY: St. Martin's Press.

Kuh, G. D., & Hu, S. (2001). The effects of student-faculty interaction in the 1990s. *The Review of Higher Education*, *24*(3), 309-332.

Lattuca, L. R., & Stark, J. S. (2011). *Shaping the college curriculum: Academic plans in context*. San Francisco, CA: Jossey-Bass.

Mayhew, M. J., Bowman, N. A., Pascarella, E. T., Rockenbach, A. N., Seifert, T. A. D., Terenzini, P. T., & Wolniak, G. C. (2016). *How college affects students: 21st Century evidence that higher education works*. San Francisco, CA: Jossey-Bass.

McKeachie, W. J. (2002). *McKeachie's teaching tips: Strategies, research, and theory for college and university teachers* (11th ed.). Boston, MA: Houghton Mifflin.

Mellow, G. O., Woolis, D. D., Klages-Bombich, M., & Restler, S. G. (2015). *Taking college teaching seriously: Pedagogy matters!* Sterling, VA: Stylus Publishing.

Merriam, S. B. & Bierema, L.L. (2014). *Adult learning: Linking theory and practice*. San Francisco, CA: Jossey-Bass.

Merriam, S. B., & Tisdell, E. J. (2016). *Qualitative research: A guide to design and implementation*. San Francisco, CA: Jossey-Bass.

Michigan State University. (2018). *Faculty Handbook*. Retrieved from https://www.hr.msu.edu/policies-procedures/faculty-academic-staff/faculty-handbook/index.html

Morgan, G. (2006). *Images of organization*. Thousand Oaks, CA: Sage.

Nelsen, W. C. (1981). *Renewal of the Teacher-Scholar: Faculty Development in the Liberal Arts College*. Washington, D.C.: Association of American Colleges.

Nyquist, J., Manning, L., Wulff, D., Austin, A., Sprague, J., Fraser, P., Clacagno, C. & Woodford, B. (1999). On the Road to Becoming a Professor: The Graduate Student Experience. *Change: The Magazine of Higher Learning, 31*(3), 18-27.

O'Meara, K. (2006). Encouraging multiple forms of scholarship in faculty reward systems: Have academic cultures really changed?. *New Directions for Institutional Research*, *2006*(129), 77-95.

Palmer, P. J. (1998). The courage to teach: Exploring the inner landscape of a teacher's life. San Francisco, CA: Jossey-Bass.

Pascarella, E. T., Smart, J. C., & Ethington, C. A. (1986). Long-term persistence of two-year college students. *Research in higher education*, *24*(1), 47-71.

Patton, M. Q. (2015). *Qualitative research and evaluation methods* (4th ed.). Thousand Oaks, CA: Sage.

Perkins, J. A. (1972). Organization and functions of the university. *The Journal of higher education*, *43*(9), 679-691.

Pólya, G. (1957). *How to solve it: A new aspect of mathematical method*. Princeton, NJ: Princeton University Press.

Renn, K. A., & Reason, R. D. (2013). *College students in the United States: Characteristics, experiences, and outcomes*. San Francisco, CA: John Wiley & Sons.

Richards, L. (2015). *Handling qualitative data* (3rd ed.). London: Sage.

Rose, M. (2014). *Why school?: Reclaiming education for all of us*. New York, NY: New Press.

Rossi, A. (2014, November). Is college worth the cost? CNN. Retrieved from http://www.cnn.com/2014/11/19/opinion/ivory-tower-andrew-rossi-higher-education-cost/

Rudolph, F. (1990). *The American college and university: A history*. Athens, GA: The University of Georgia Press.

Saldaña, J. (2013). *The coding manual for qualitative researchers* (2nd ed.). Thousand Oaks, CA: Sage.

Schmidtlein, F. A., & Berdahl, R. O. (2011). Who controls academe? In S. R. Harper & J. F. L. Jackson (Eds.), *Introduction to American higher education* (384 – 395). New York, NY: Routledge.

Schon, D. A. (1983). *The reflective practitioner: How professionals think in action*. New York, NY: Basic Books.

Schon, D. A. (1987). *Educating the reflective practitioner: Toward a new design for teaching and learning in the professions*. San Francisco, CA: Jossey-Bass.

Scott, W. R. & Davis, G. F. (2007). *Organizations and Organizing: Rational, Natural, and Open Systems Perspectives*. Upper Saddle River, NJ: Prentice Hall.

Shadiow, L. K. (2013). *What our stories teach us: A guide to critical reflection for college faculty*. San Francisco, CA: Jossey-Bass.

Shulman, L. (1986). Those who understand: Knowledge growth in teachers. *Educational Researcher, 15*(2), 4–31.

Shulman, L. S. (2004). *Teaching as community property: Essays on higher education*. San Francisco, CA: Jossey-Bass.

Smith, D. K. (1978). Faculty vitality and the management of university personnel policies. *New Directions for Institutional Research*, *1978*(20), 1-16.

Smith, R.A. (1995). Reflecting critically on our efforts to improve teaching and learning. In E. Neal, (ed.) *To Improve the Academy*, Vol. 14, pp. 5–25. Stillwater, OK: New Forums Press.

Smith, S. J. (1992). Physically remembering childhood. *Phenomenology + Pedagogy, 10*, 85 – 106.

Stenberg, S. J. (2005). *Professing and pedagogy: Learning the teaching of English*. Urbana, IL: National Council of Teachers of English.

Tagg, J. (2003). *The learning paradigm college*. San Francisco, CA: Jossey-Bass.

Thelin, J. (2011). *A history of American higher education: Second edition*. Baltimore, MD: The Johns Hopkins University Press.

Tierney, W. G. (1988). Organizational culture in higher education: Defining the essentials. *The Journal of Higher Education*, *59*(1), 2-21.

Van Manen, M. (1991). *The tact of teaching: The meaning of pedagogical thoughtfulness*. Albany, NY: State University of New York Press.

Wieman, C. E. (2017). *Improving how universities teach science: Lessons from the Science Education Initiative*. Cambridge, MA: Harvard University Press.

Williams, S. (2017). *Why the professor can't teach: If research is the priority, then what about teaching?*

Zajonc, A., Palmer, P. J., Scribner, M., & Nepo, M. (2013). *The heart of higher education: A call to renewal*. San Francisco, CA: Jossey-Bass.