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Training Teaching Assistants Across the Curriculum: A Study of the Certificate in University Teaching (CUT) Program

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TRAINING TEACHING ASSISTANTS

TRAINING TEACHING ASSISTANTS ACROSS THE CURRICULUM: A STUDY
OF THE CERTIFICATE IN UNIVERSITY TEACHING (CUT) PROGRAM

BY

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DISSERTATION

Submitted in partial fulfillment of the requirements
for the degree of Doctor of Philosophy in Education
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University of Missouri-St. Louis, 2012

St. Louis, Missouri

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Abstract

This action research dissertation examines the development over nine semesters of a 15-hour certificate in higher education teaching that is geared toward developing Teaching Assistants (TAs) across disciplines. The dissertation builds on the Preparing Future Faculty (PFF) models. This research is informed by both social constructivist theory and social cognitive theory, and consists of personal narratives from my multiple roles within the Certificate in University Teaching (CUT) program as well as voices of CUT participants from interviews and reflective journals. Data sources also include teaching and program observations, curriculum documents, and teaching syllabi. I locate myself as both insider and outsider to the CUT initiative since I did not design the program but did function as observer, instructor, and leader. Findings will address program assessment data, situated individual growth of participants, and reflections on challenges and frustrations. This study concludes with recommendations for improving Teaching Assistant training programs to prepare TAs for higher education teaching roles. This study also offers a Learning Continuum Taxonomy that serves as a reference for identifying and understanding how Teaching Assistants experience the learning process.

Dedication

I dedicate this dissertation to the two most influential and important women in my life—
my mother, Sylvia, and my daughter, Mia.

Mia, may you always remember to treasure the values of hard work, persistence,
determination, and believing in yourself.

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Chapter One

Introduction

Programs for the training and professional development of graduate Teaching Assistants (TAs) continue to grow across university and college campuses with the establishment of centers focused on improving teaching in higher education and the appointment of faculty to develop curricula and direct programs (Little & Panvini, 2002). Teaching Assistants (TAs) are often new to university culture and generally under-prepared for their teaching responsibilities (Irons & Buskist, 2008; Shannon, Twale, & Moore, 1998). Consequently, structured programs are needed to provide instructors in higher education with the knowledge and skills for excellent teaching since ongoing criticism of the quality of undergraduate education points to poor teaching by both faculty and TAs (Lewis, 1997; Witherspoon & Gilbert, 1996).

Within higher education, there is intensified competition for faculty, undergraduate and graduate students, research grants, revenue, and prestige. Universities and colleges also face a changing internal environment—the increasing use of information technologies, the steady growth in diversity of the student body, and an emergent focus on interdisciplinary programs (Sorcinelli, Austin, Eddy, & Beach, 2006). Furthermore, as full-time faculty positions become less stable due to state, university, and departmental budgetary constraints, both adjunct faculty and TAs are being utilized to teach undergraduate students in lower division general courses (Hendrix, 2008; Johnson & McCarthy, 2000; Kuther, 2003). However, TAs are frequently criticized for their lack of active interpersonal communication with students and their lack of teaching skills even though, in many fields, it is assumed that if the person teaching has an undergraduate or

graduate concentration in the subject being taught, he or she is qualified to teach (Lewis, 1997). The combination of an increasingly complicated institutional environment and a group of Teaching Assistants across the disciplines who are neither prepared for university culture, have developed the pedagogical skills necessary to teach a course, result in an outcome which is often detrimental for both the TA and his/her students.

Background

The Certificate in University Teaching (CUT) program is offered at the University of Missouri-St. Louis, a public metropolitan research university of about 17,500 students. CUT is a voluntary program offered through the university's Center for Teaching and Learning (CTL). The CTL was established in October 2001 for the purpose of engaging faculty, graduate students, staff, and administration on issues of teaching and learning, including supporting research, integrating technology, and improving learning (<http://www.umsl.edu/services/ctl/index.html>). The CUT program was initiated in the fall 2005 semester.

CUT aims to prepare graduate Teaching Assistants across the disciplines for teaching duties at the university level. The CUT program is currently in its seventh year of existence, with an annual group of about 40 master's and doctoral students each year. Four instructional units comprised the CUT program at the time of this study, which is based on the Preparing Future Faculty (PFF) model, a national movement initiated in 1993 to transform the way aspiring faculty members are prepared for their careers (www.preparing-faculty.org). PFF programs provide doctoral students, as well as some master's and postdoctoral students, with opportunities to observe and experience faculty responsibilities at a variety of academic institutions with varying missions, diverse

student bodies, and different expectations for faculty (www.preparing-faculty.org).

Graduate students in the CUT program may enroll either in the workshops, in two for-credit course options, or in a combination of the two. Unit 1 and Unit 2 workshops meet on alternating Fridays; Unit 3 is scheduled on an individual basis; Unit 4 meets three to four times during the semester. (See CUT Curriculum on pp. 8-11 for a detailed description of program components).

Upon completion of all four CUT units, participants submit a teaching portfolio (for specific components of the portfolio, see p. 11). CUT graduates are honored with a signed certificate of completion at the annual Graduate Student Professional Development Conference. Students also receive a letter of recommendation from the Graduate School Dean and the CUT program TA Coordinator.

Purpose of the Study

The purpose of this basic qualitative study is to evaluate the relationship between Teaching Assistants' participation in the CUT program and their classroom experiences and practices teaching undergraduate students. Additionally, CUT participants' experiences will be described as they progress through the various stages of the program. Findings will address program assessment data, curricula development, situated growth of participants, as well as reflections on challenges and frustrations. Recommendations for best practices will also be addressed. A taxonomy of developmental levels was created inductively from the data.

Research Questions

1. What do graduate students report they are learning about teaching in the CUT program?

2. To what extent do Teaching Assistants increase or decrease their teaching self-efficacy and self-awareness of growth as a result of participating in the CUT program?
3. How might the CUT experiences and curriculum be improved?

Significance of the Study

In general, there has been little research (particularly qualitative) examining the effects of training programs on graduate students' teaching performance (Park, 2004). Previous research has focused on developing graduate courses on teaching in college/university environments (Lewis, 1997; Marincovich, 1998; Ebest, 2005), and identifying the need for TA training programs and program design (Lewis, 2002; Richards, 1998). Current research on TA training has called for more studies to assess the effectiveness of such programs (Abbott, Wulff & Szego, 1989; Davis & Kring, 2001; Speer, Gutmann, & Murphy, 2005). The last 15 years has seen a marked increase in efforts to develop excellence in teaching in higher education (Gaff, Pruitt-Logan, Sims, & Denecke, 2003). Findings from this study will contribute to the literature by providing an examination of one model over nine semesters.

This study also has significance for its primary stakeholders—faculty developers, department chairs, graduate coordinators, and deans—as well as the Teaching Assistants and the undergraduate students they teach. Future expansion of the CUT program will be shaped, in part, from the findings of this research. Although a basic qualitative study, this research also has elements of action research, including evaluating and reflecting upon the developmental process of practice (McDonough, 2006). Furthermore, secondary stakeholders—academic institutions and the community at large—also benefit from

program evaluation outcomes, because program improvements result in a stronger educated community and more informed higher education teaching.

Limitations

The limitations of the study include:

1. Participants lost due to attrition.
2. The type of teaching experience graduate students have coming into the program (full or partial responsibility; graduate school or former teaching experience).
3. The type of education that graduate participants have received due to varying sociocultural and classroom climate norms.
4. The type of graduate degree that participants are pursuing since several disciplines have their own departmental TA training.
5. The type of graduate students attending the CUT program (e.g., one discipline area requires attendance while other disciplines range in attitude from indifference to hostility toward the CUT program).

Delimitations

The delimitations of this study include:

1. Identifying a representative number of female and male participants to reflect gendered viewpoints.
2. Selecting a representative number of Ph.D. and M.A./M.S. candidates to reflect differing educational viewpoints and experiences.
3. Due to the small sample size, it wasn't possible to select representative participants based on race/ethnicity. This may also reflect the overall underrepresentation of minorities as higher education instructors and faculty.

Assumptions

The assumptions guiding my research are:

1. CUT participants want to improve their teaching.
2. CUT participants are motivated to succeed in the classroom.
3. CUT participants are willing to accept feedback on their teaching.
4. CUT participants can improve their teaching via reflection.

Positioning

I come to this study with an emic (insider) perspective to CUT and a history of interest in TA development. As a Teaching Assistant in my master's degree program in Composition Rhetoric and Pedagogy from 1992-1994, I participated in an extensive week-long training program for Composition TAs that was conducted by the Writing Program Administrator (WPA) and current CUT Program Coordinator. At the time, no other department on campus offered pre-semester training or ongoing departmental support for TAs, nor was there a campus-wide TA training program. However, even with initial training and support, I dreaded my teaching debut in front of a classroom. Like many Teaching Assistants, I didn't have any prior teaching experience, but it was more than just my lack of practical experience that scared me. I was certain that I would feel so self-conscious in front of my students that I would not be able to speak. Furthermore, I had not developed any self-efficacy to allay my fears. The WPA sensed my lack of confidence as well.

As a result, for the first semester of my master's program I was the only Teaching Assistant assigned to another instructor who taught an introductory literature survey course. All of the other Teaching Assistants in my department were assigned two sections

of Freshman Composition. My assignment initially upset me a great deal, but it turned out to be quite useful in allowing me to overcome some of my fears. At first I was resistant because I felt left out from what the other Teaching Assistants were doing in their own classrooms. I then began to plan the series of writing workshops that assisted my students as they were working on their literature papers for the survey course. I experienced success in teaching these workshops, although they were challenging because attendance varied greatly. But not being responsible for my own course as I developed confidence and experienced some positive feedback from my students and the WPA helped me tremendously when I became the instructor of record for Freshman Composition the following semester.

During my two-year appointment, I gained considerable knowledge of TA training and realized an interest in that area of specialization as I collaborated with my mentor (the WPA) on several projects. My subsequent 20 years of teaching experience in higher education at two different institutions further shaped my perspective on the need for TA training. Therefore, over time I have developed biases on what the landscape of TA training should look like, and I am aware of how my own sociocultural experience might inform such biases during this study.

I continued the emic perspective throughout this study as I assumed several roles at different times during the data collection process: first as an observer, then as a participant-observer, and finally as a CUT program instructor and evaluator. For the duration of the study, I was present at all workshop sessions. In these various roles over several years, I continued to be invested in improving the effectiveness of the CUT program. The advantage to my myriad experiences with program development and

implementation is the richness of my understandings, nuanced holistic perspective on data analysis, and extensive experience actually interacting with and observing participants.

CUT Curriculum

The CUT curriculum outlined below was taught throughout this study. In 2011, a fifth unit was added on Teaching with Technology, though participant observations were completed before that unit was taught.

Unit 1: Teaching for Learning in the University is designed to guide graduate students to promote active and meaningful learning in college classrooms and to develop college students' critical thinking skills. Students are required to take seven of the eight workshops offered in the spring semester: 1) Developing a Teaching Resources Portfolio; 2) Integrating Civic Engagement into your Courses; 3) Designing and Assessing Assignments; 4) Revising your Teaching portfolio; 5) Applying Theories of Learning and Motivation; 6) Observing the Strategies of Award-Winning Professors; 7) Observing the Strategies of Award-Winning Professors (continued); 8) Practicing Learner-Centered Instruction.

Unit 2: Preparing for University Teaching requires participants to expand their pedagogical knowledge through readings on learning theory and practical classroom application in their own settings. This is achieved by participating in seven out of eight workshops held in the fall semester: 1) Planning a Course, Designing a Syllabus, 2) Grading, 3) Engaging Students in Learning, 4) Motivating Students to Learn, 5) Writing Across the Curriculum, 6) Developing Your Teaching portfolio, 7) Refining Your Writing Skills, 8) Ensuring Social Justice.

Unit 3: Teaching Practicum allows students to actively teach with feedback on how to apply the teaching strategies learned in CUT, to meet the needs of all learners, and to provide the opportunity to reflect on one's teaching. The Practicum is offered all semesters. Observations can occur in a variety of settings: 1) teaching a three-hour or community college campus course, 2) running a laboratory, 3) teaching a Continuing Education or Student Success course, or 4) tutoring at the campus Writing Lab. Teaching Assistants are observed teaching three times by a CUT facilitator which is followed by a debriefing session with the TA to discuss his/her classroom experience. Throughout the Practicum TAs write weekly teaching logs, reflecting on their own teaching and student learning, and program facilitators appropriately comment on reflections as a feedback dialogue.

Unit 4: Professional Development, offered during the fall and spring semesters, ensures that graduate students are prepared for the job market and career requirements by drafting a curriculum vitae and letter of application, discussing grant writing, and preparing and presenting a job talk. Students have the option 1) to attend an etiquette banquet to prepare for campus visits, 2) to attend a colloquium or workshop sponsored by the CTL or 3) to participate in a mentoring program by shadowing one's mentor in the discipline of choice on a campus in the St. Louis area or in the UM-system. Shadowing includes attending classes and committee meetings to gain an understanding of differing environments and expectations at public and private, graduate and undergraduate, research and non-research, two-year and four-year colleges and universities.

To encourage participation, units may be taken non-sequentially and/or in combination, although enrolling in more than two units per semester is not recommended.

Students should have completed one unit before enrolling in the Practicum so that they have some exposure to theory introduced in these earlier units.

Graduate students interested in using a CUT course for three credits in their degree programs may do so if their departments accept the credit. These credit courses are as follows:

Ed Psy 7647: Teaching for Learning in the University—(offered in the fall semester)—this for-credit course examines current research in learning, instruction, motivation, and assessment as it pertains to teaching and learning in complex post-secondary settings. Graduate students discover the current research on teaching and learning in their disciplines, use it to promote active and meaningful learning, and learn how to develop undergraduates' critical thinking skills. Throughout the semester, students compile a teaching resources portfolio (this course counts as CUT Unit 1).

Eng 5850: Scholarship of Teaching and Learning—(offered bi-annually in the spring semester). This for-credit course introduces theories of reading, writing and thinking; engages students in the strategies and methodologies of qualitative classroom research; teaches students to analyze qualitative research data to refine and refresh pedagogical practice; and emphasizes research in effective pedagogical practices within students' disciplines. Students are responsible for finding, critiquing, and presenting pedagogical essays within their disciplines. The final project is a collaborative classroom research project that students will design, conduct, and critique throughout the semester (this course counts as Units 2 and 3).

In addition, a teaching/technology component comprised of several courses in both English and Education is now offered as a for-credit course option, though it was not

offered during this study. While enrolled in the CUT program students create and collect many artifacts that comprise the teaching portfolio, which is submitted at the completion of the program. The teaching portfolio includes the various texts developed during CUT that highlight their teaching experience and expertise.

- Philosophy of teaching statement—a document developed in Unit 1 and revised in Unit 2 that explores the graduate student's emerging teaching philosophy and combines theory, practice, and personal experience.
- Teaching log—required as part of the Practicum (Unit 3). While teaching, students are required to keep a weekly teaching log that is submitted to the program coordinator and returned to the student with comments. Students reflect on the strategies learned in CUT that they are using in their own classrooms, specifically the ways in which these strategies are working and the ways in which they can be improved.
- All syllabi and handouts, writing and active learning activities
- Assignments and rubrics
- Summaries of student evaluations, letters from students, or graded papers
- Evidence of professional development (conferences, certificates of attendance, honors and awards)

Theoretical Framing

The theories that have guided the design of the CUT program align well with the theories that frame my research: social constructivist theory and social cognitive theory. Social constructivism is grounded in the writings of Piaget (1970) and Vygotsky (1978), as well as Dewey (1966). Most constructivists endorse the idea that learners are active in

constructing their own knowledge and that social interactions are important to knowledge construction (Bruning, Schraw, Norby, & Ronning, 2004). In social constructivist theory, Piaget believes that both external and internal factors contribute to knowledge construction; he focuses mainly on individual development. However, in sociocultural theory, Vygotsky (1978) believes that learning is inherently social because mind is formed through living in a social community and acquiring mediational tools such as language. All teaching and learning reflect situated cultural settings (Cobb & Bowers, 1999).

In social cognitive theory Bandura (1986) proposes that self-regulatory systems mediate external influences and provide a basis for purposeful action, allowing people to have personal control over their own thoughts, feelings, motivations, and actions. Bandura defines self-efficacy as “the belief in one’s capabilities to organize and execute the courses of action required to manage prospective situations” (1995, p. 2).

In my study, I use social constructivist theory and social cognitive theory as frameworks for examining how CUT participants’ collaborative work environments in which they share curriculum, teaching strategies, presentations, and experiences contribute to their development of self-efficacy as instructors. As Tschannen-Moran and Woolfolk Hoy (2007) note, self-efficacy is a motivational construct, which is how I used it in this study. Bandura (1977) presents the view that psychological procedures create and strengthen expectations of personal efficacy. The sources of efficacy expectations are as follows: 1) performance accomplishments (participant modeling), 2) vicarious experience (live modeling), 3) verbal persuasion (interpretive treatments), 4) emotional

arousal (attribution), and 5) metacognition (Bandura, 1997). In the CUT program these sources of efficacy are integrated into the curriculum in the following ways:

- Performance accomplishments: Watching the CUT Coordinator and Assistant Coordinator model active learning activities and exercises within the safety of the CUT classroom allows Teaching Assistants to overcome fear of performance in their own classroom.
- Vicarious experience: Observing award-winning professors teach (Unit 1) and shadowing a professor in one's field for one day (Unit 4) provides vicarious models.
- Verbal persuasion: Receiving positive and constructive feedback from the CUT Coordinator and Assistant Coordinator on teaching performance as well as feedback on teaching logs (Unit 3) challenges individual growth through dialogue.
- Emotional arousal: Giving informal encouragement to Teaching Assistants for the duration of the CUT program builds self-confidence and lessens apprehension about their role and responsibilities as TAs; it also supports their sense of community.
- Metacognition: The knowledge about one's own cognitive functioning is related to personal characteristics and strategies, probed through CUT teaching logs and workshop discussion. Metacognitive skills are related to self-efficacy strength. Teaching Assistants who routinely examine their teaching and learning processes in writing reinforce their understanding of their own learning strengths and weaknesses, and are better able to help their students' succeed in the classroom.

University instructors who increase their awareness of these constructs can increase their self-efficacy, benefiting their students. They tend to receive more positive feedback from their student evaluations; they tend to be more student-focused; and they are more likely to encourage their own students to use a deep process approach in learning (Gibbs & Coffey, 2004; Prieto & Altmaier, 1994; Prieto & Meyers, 2001). Metacognition, then, is an aspect of emerging self-awareness.

Organization of Study

Chapter One provides a general introduction and overview of this study. Chapter Two will contain a review of theories and research relevant to TA development, the PFF movement, and literature on self-efficacy. Chapter Three will provide a rationale for the study's basic qualitative design and choice of analytical tools. Chapter Four will present participant stories of varied learning in the CUT program. Chapter Five will introduce participants who excelled in the program and participants who resisted the CUT pedagogy. Chapter Six will discuss the implications of this inquiry, along with recommendations for improving the CUT program and suggestions for future research.

Chapter Two

Review of Related Literature

This study examined the development of a certificate in higher education teaching geared toward Teaching Assistants across disciplines. The goal of this research was to determine ways in which Teaching Assistants experienced growth throughout the CUT program. Therefore, the review of related literature is organized into the following sections: 1) The Problem, 2) A History of TA Training, 3) Areas of Focus for TA Training, 4) Creating an Effective TA Program, 5) Assessing Growth, and 6) TA Training Program Components.

The Problem

Programs for the training and professional development of graduate Teaching Assistants continue to grow across university and college campuses with the establishment of centers for teaching excellence, the appointment of faculty developers, and the reality that Teaching Assistants are new to university culture and underprepared for their responsibilities (Chism, 1998; Sorcinelli, Austin, Eddy, & Beach, 2006). Further, ongoing criticism of the quality of undergraduate education that points to poor teaching by faculty and particularly TAs, underscores the need for pedagogical training (Austin, 2002). Most graduate students learn about teaching through trial and error in the classroom with their students as guinea pigs (Darling & Dewey, 1990). Even achieving a minimal level of competence in each of these duties requires a substantial commitment of time and mental resources (Kuther, 2003). However, training TAs to be effective teachers in the classes that they are assigned already requires more time and personnel than most

departments in higher education are willing or able to commit (Leverenz & Goodburn, 1998).

Teaching Assistants were not always given full course responsibility; originally, the Teaching Assistantship was based on an apprenticeship model (Lave, 1996). In Lave's model, Teaching Assistants worked with professors in a specific course, primarily by grading and preparing class materials. Traditionally, TAs worked solely with faculty and had little direct contact with students (Lewis, 1997). But as full-time faculty positions become less stable due to departmental budgetary constraints, both adjunct faculty and TAs were often called upon to independently teach undergraduate students in lower division courses (Austin, 2002). This reliance on inexperienced and often untrained instructors has damaging effects on the professoriate itself. Graduate students who have unsuccessful experiences as TAs often do not enter the professoriate, or, if these graduate students do decide to enter the professoriate, their lack of adequate training during the TA experience results in poor teaching skills, which in turn impacts students' learning (Nyquist, Abbott, Wulff, & Sprague, 1991).

When formal TA training is offered, it is generally provided at the university or departmental levels. At the university level, it typically deals more with university policy and procedures rather than effective instructional delivery techniques (Gray & Buerkel-Rothfuss, 1991). University training is usually limited to a one or two-day workshop, delivered primarily through workshop presentations by university faculty and administrators (Roehrig, Luft, Kurdziel, & Turner, 2003). Such training also tends to focus on resolving immediate classroom problems rather than emphasizing teacher training for long-range professional goals (Boyd, 1989; Shannon, Twale, & Moore,

1998). Further, the relationship between TA preparation and a graduate student's professional development needs to be explored (Leverenz & Goodburn, 1998).

Training offered by academic departments is less consistent, ranging from brief general orientations to structured teaching practicums supervised by faculty mentors. Unfortunately, individual departments seldom offer specific TA training programs for various reasons: staff and financial constraints, lack of commitment to teaching, beliefs that TAs do not need the training, and lack of faculty willing and able to assist TAs (Austin, 2002; Holten & Nilson, 1990; Shannon, Twale, & Moore, 1998). Often, departments that are interested in a more comprehensive program for their TAs do not know how to approach such training because historically, the professoriate has not been trained to teach, only to research.

In general, there has been little research examining the effects of Teaching Assistant training programs on TAs. Previously, research has focused on identifying the need for programs and program design, and more recently, best practices for TA programs (Border, 2006). Research on TA training has called for more studies designed to assess the effectiveness of such programs (Abbott, Wulff, & Szego, 1989; Carroll, 1980).

This literature review will trace the history of TA training from preparing future faculty programs (PFF) to the legitimization of the scholarship of teaching and learning. My dissertation examined one specific TA training program at the University of Missouri-St. Louis—the Certificate in University Teaching (CUT)—and analyzed the effectiveness of that program as a model for Teaching Assistant performance. As this literature review will show, the argument for the need for TA training programs has

already been successfully made; therefore, my research focuses on program trends, student experiences and beliefs, a more detailed micro analysis of program systems, procedures, and processes, and future directions for TA training and development.

A History of Teaching Assistant Training

The need for professional training for prospective teachers was discussed as far back as 1930 by the Institute for Administrative Offices of Higher Education at the University of Chicago. The papers read at the conference ranged from inquiries into weaknesses in college teaching and methods of training college teachers to sample preparatory programs at three universities (Marting, 1987). A 1949 conference on college teachers' preparation noted that few schools had made an active commitment to helping college teachers prepare for their jobs. This conference addressed TA teaching loads, working under supervision of experienced faculty, and seminars and workshops on teaching (Wise, 1967).

Ten years later, a commitment to TA training was revisited. In the late 1950s, public concern over the quality of undergraduate education was brought to the attention of university administrators. Part of that concern included the quality of teaching provided by Teaching Assistants who worked with large numbers of undergraduate classes. In addition to the questioning of educational standards, a 1956 American Council of Education conference focused on disproving "the assumption that such preparation [college teachers'] is exclusively a matter of content preparation, and the assumption that pedagogical competence can serve as a substitute for scholarly knowledge" (Axelrod, 1973, p. 107). Still, the beliefs about the teacher's role that dominated this period were the traditional academic folklore captured by the following slogans: teachers are born, not

made; teaching is an art, not a science; a professor's classroom is his castle; hire good people and get out of the way (Gaff, 1975). These sayings implied that little could be or should be done to improve the teaching of professors (Tiberius, 2002).

The college boom period of the 1960s and 1970s brought more students to universities and colleges than existing faculty could accommodate, particularly with the establishment of an open admissions policy and changing demographics. For the first time since World War II in higher education, student diversity was growing, as were the numbers of non-traditional students who were expected to simply adjust and conform to university culture. To compensate for the expanding student body, institutions moved to increase the number of TAs being used to supplement faculty teaching (Lewis, 2002). TAs performed a variety of instructional tasks, including conducting discussions and laboratory sessions, holding office hours, lecturing, and even assuming total responsibility for a course (Nyquist, Abbott, Wulff, & Sprague, 1991). Most TAs were employed 20 hours per week and were financially supported in their graduate studies, a standard that continues in present day.

As the need for TA development was increasingly recognized, the prevailing question became: Whose responsibility was it to train graduate Teaching Assistants—individual departments, graduate schools, or campus-wide initiatives? In his 1963 book, *The Miseducation of American Teachers*, Koerner wrote: “Academic departments must accept major responsibility both for the present state of teacher education and for affecting improvements” (p. 263). Almost simultaneously, the first faculty development units were established, beginning with the Center for Research on Learning and Teaching in Michigan in 1962 (Tiberius, 2002). Much of the early literature on TA training and

development focused primarily on descriptions of programs in an effort to help others understand the process and to institute similar training on their own campuses (Lewis, 2002). Still, at the end of the 1960s, there were fewer than 50 faculty development programs in the U.S. (Sullivan, 1983).

In contrast, by 1975, 41% of all four-year institutions had faculty development programs (Centra, 1976). A transformation had taken place in the late 1960s and early 1970s in the normative beliefs about the role of teaching (Tiberius, 2002). This transformation was characterized by the emergence of a new set of assumptions about the role of teacher: the belief that instructional competencies are learned; that these competencies include a complex set of knowledge, attitudes, values, motivations, skills, and sensitivities; and that teachers had a responsibility to learn the competencies (Gaff, 1975). In her review of the literature on TA training programs from 1976-1986, Parrett (1987) found that a majority of the programs were discipline specific and included pre-service orientations along with semester-long courses. The courses ranged from one hour per week to three hours per week for a semester. In most of the programs attendance was required and TAs were often paid for pre-service orientation time and given credit for the semester-long courses. The majority of these courses concentrated on the specifics of how to teach a course (Lewis, 2002).

According to Parrett (1987), topics covered in typical TA training programs included: professionalism, careers and job hunting, administrative policies, departmental expectations, general teaching methods, models of instruction, problem solving, syllabus development, textbook selection, grading papers, exam writing, and interpersonal relations.

Many books on university teaching appeared during this period, a number of them directed at skills. The more frequently read texts included: *Teaching Tips: A Guidebook for the Beginning College Teacher*, 6th and 7th editions (McKeachie, 1969; 1978); *Teaching and Learning in Higher Education* (Beard, 1970); *The Assessment of University Teaching* (Falk & Dow, 1971); and *What's the Use of Lectures?* (Bligh, 1972).

Additionally, several new journals and publications were devoted directly to teaching in higher education, including *The Chronicle of Higher Education* (1966); Jossey-Bass publishers (1967); ERIC Clearinghouse on Higher Education (1968); *Change: The Magazine of Higher Learning* (1969); *Higher Education* (1971); *Instructional Science* (1972); *Research in Higher Education* (1973); and *Studies in Higher Education* (1976) (Tiberius, 2002).

The Professional and Organizational Development Network in Higher Education (POD). The Professional and Organizational Development Network in Higher Education (POD) was also founded during this period. Developed in 1975, POD is devoted to improve teaching and learning in post-secondary education. The three purposes of POD are as follows: 1) to provide support and services for its members through publications, conferences, consulting, and networking; 2) to offer services and resources to others interested in faculty development; 3) to fulfill an advocacy role, nationally, seeking to inform and persuade educational leaders of the value of faculty, instructional, and organization development in institutions of higher education (www.podnetwork.org). POD also publishes the annual journal *To Improve the Academy* and in 2001 published *A Guide to Faculty Development: Practical Advice, Examples, and Resources* (www.podnetwork.org). POD's annual conference draws faculty developers

from across the U.S. and Canada to collaborate on programming, technology, research, organizational, and funding issues occurring throughout the year.

Student-Centered Teaching and Social Constructivism. As a result of general admissions policies in the late 1970s and 1980s, student and group-centered teaching became very popular. Active learning approaches blossomed, drawing on Brazilian educator Paulo Freire's belief that students learn most effectively in a problem-posing situation, rather than through the "banking concept of education," whereby students serve as depositories for the teacher's information (Freire, 1970). No longer were professors merely lecturing; they began to draw upon a number of strategies designed to involve their students in the learning process. Some of these strategies originated in composition pedagogy. In *Composition in the University*, Crowley (1998) explains:

Composition scholarship typically focuses on the processes of learning rather than on the acquisition of knowledge, and composition pedagogy focuses on change and development in students rather than on transmission of a heritage.

Composition studies encourage collaboration. It emphasizes the historical, political, and social contexts and practices associated with composing rather than concentrating on texts as isolated artifacts. (p. 3)

These beliefs have been translated into classroom practice. Writing instructors routinely de-center the classroom and allow students to work in small groups, generating and critiquing ideas, sharing and presenting information, and reading and responding to each other's writing (Ebest, 2005). In effect, composition instructors serve as facilitators rather than dictators. As a result, students are actively constructing knowledge. This

composition pedagogy served as a basis for the development of TA programs, which shares many of the same characteristics.

According to Tiberius, “Constructivism, especially social constructivism became more popular in this period. Constructivists view learning as a process of enculturation into a community of practice by means of social interaction among learners and between learners and teachers” (2002, p. 33). Teachers must understand their students’ previous experiences, their motivations, and their skills through interaction and communication, not by asserting their authoritarian role over students. Effective teaching is interactive, which is a central pedagogical theme of TA development. In his book, *Scholarship Reconsidered*, Boyer proposes, “Good teaching means that faculty, as scholars, are also learners” (1990, p. 24).

During this period, the Carnegie Foundation for the Advancement of Teaching promoted the Doctor of Arts degree that was designed to prepare graduates for teaching in college settings (Richlin, 1995). Centers to support faculty growth, funded by the Danforth and Kellogg Foundations and including centers at Stanford, Northwestern, and Harvard, were established nationwide (Chism, 1998).

The first national conference on TA issues was held in 1987 at Ohio State University, with subsequent conferences in Washington and Texas. At first the majority of the dialogue dealt with policy issues. Ken Eble’s keynote address, entitled “Defending the indefensible,” as reported in Chism (1998) questioned why and how institutions employ TAs, recommending that “we ‘get the TAs off their knees,’ and ‘put the education of Teaching Assistants first and their exploitation second, or last’” (Cited in Chism, 1998, p. 4).

During this time, studies emerged on TA development and appeared in literature on a regular basis. Sprague and Nyquist's 1991 research, "A Developmental Perspective on the TA Role," Ruiz's (1987) work with teacher training techniques, and Darling and Staton's (1989) study on TA socialization all contributed to the growing scholarship in the field by offering supervisors an understanding of Teaching Assistant growth, and the complex responsibilities TAs share.

A new challenge arose in TA training in the 1980s—the foreign or non-native speaking TA or ITA (International Teaching Assistant). Though ITAs provide cultural diversity at universities, this cultural diversity can cause misunderstanding and difficulty in a teaching situation (Lewis, 1997). At first, ITAs were assigned to research roles in order to avoid having to grade papers and assume other classroom duties. Once ITAs were assigned to courses, discussion sections, and labs, there were many complaints from undergraduates about the language and teaching skills of international TAs (Fisher, 1985). This communication difficulty added to the stress of an already overburdened ITA. Eventually, as TA programs were experiencing some success, a component specifically for ITAs was added. ITA placement still remains an issue, however, particularly at large research institutions. Many states have mandated training programs for ITAs to ensure that classes are taught in clear English and the quality of these programs is maintained (Lewis, 1997).

By the 1990s, TA training programs expanded considerably, with many universities offering year-round support services for TAs including seminars on teaching, teaching consultation services, newsletters, and awards for outstanding Teaching Assistants. More and more programs offered advanced development in the form of three

credit-hour courses that delve into many aspects of college teaching, including curriculum development, reflective teaching, theories of motivation, and the non-teaching aspects of being a faculty member (i.e., committee work, sponsoring student groups, research) as well as internship programs in cooperation with two-year and four-year institutions in the region (Johnson, 1996; Witherspoon & Gilbert, 1996). Certification programs were also being implemented to provide TAs with documentation of their education and development as university instructors.

Preparing Future Faculty

The biggest contribution to and extension of TA development during the 1990s was the Preparing Future Faculty (PFF) initiative, sponsored by the Association of Colleges and Universities and the Council of Graduate Schools and supported by the Pew Charitable Trusts. The purpose of the initiative was to prepare graduate students for a variety of responsibilities, not just research or teaching. A common set of goals (supporting a variety of institutions—two-year, four-year, liberal arts, and a historically black college) was articulated (DeNeef, 2002):

1. To provide graduate students with on-site experience of faculty life at diverse academic institutions by pairing them with faculty mentors at neighboring colleges and universities, and by creating specific opportunities for visitations to the cluster campuses;
2. To provide forums, both on and off the research campus, at which graduate students and faculty from diverse institutions could speak candidly about professional expectations regarding, and the relationships between, faculty research, teaching, and service;

3. To encourage graduate programs themselves to integrate the professional development of graduate students, including appropriately structured pedagogical training and teaching experiences, more directly into graduate education. (p. 5)

The program's first phase began in 1993 with the development of model PFF programs at 88 post-secondary institutions divided into 17 clusters, each institution designing its own program. "PFF's second phase, running from 1997-2001, was intended to institutionalize and spread the program" (Ebest, 2005, p. 38). The third and fourth phases focused on developing specializations in science and mathematics and in the humanities and social sciences, respectively (Ebest, 2005). By the end of the fourth phase, PFF programs had been implemented at more than 45 doctoral degree-granting institutions and nearly 300 partner institutions in the United States. While the grant period expired in 2003, the Council of Graduate Schools continues to provide administrative support to existing programs and to those wishing to develop PFF programs (www.preparing-faculty.org). By the year 2001, the PFF program had reached more than 295 institutions and introduced more than 100,000 graduate students to the different cultures of postsecondary education (DeNeef, 2002).

Although early results from PFF programs were encouraging, particularly as it "legitimized conversations about teaching/learning issues" (DeNeef, 2002, p. 2), there was little empirical data about the overall impact of a PFF program on graduates as they entered the job market and during their early years as new faculty. In both 1998 and 2001, as a significant number of PFF students graduated, a group of faculty and graduate students at Duke University surveyed 271 PFF alumni from various universities; 129

graduates responded. The survey asked for quantitative assessments of specific parts of the PFF program—teaching skills, mentoring relationships and PFF organized activities. Qualitative responses were also obtained, specifically discussing their transition from graduate student to faculty member.

Of the categories surveyed, the mentoring relationship and PFF programs organized at the home institution proved the most valuable. By a significant gap, the least valuable component of the students' experience was the non-PFF professional development programs offered at the home institution.

These findings are not surprising, and they corroborate what many have believed for some time, namely, that graduate programs pay little attention to the overall professional development of their graduate students, that graduate faculty have very little direct knowledge of or interest in faculty life at non-research universities, and that an effective way to provide this broader professional knowledge is simply to give graduate students organized access to a variety of academic settings. (DeNeef, 2002, p. 8)

PFF alumni narratives revealed that PFF students felt that they knew more about the American academic scene and the variety of institutions that comprise it than their non-PFF competitors. Further, PFF alumni felt that they knew better how to present themselves as professionals who could fit into different institutional environments (DeNeef, 2002). These findings suggest that PFF also prepared graduates for their first years on the job. Several alumni reported that they were less likely than their former or present colleagues to see teaching and research as either distinct or in competition with each other (DeNeef, 2002).

Examples of PFF programs vary somewhat in design. Iowa State University offers a one-credit seminar series, a three-credit course, and two independent studies, as well as a Graduate Student Teaching Certificate with two tracks, one for PFF participants, and one for others (www.preparing-faculty.org). At Iowa State, students must apply for acceptance into the PFF program. At Michigan State University, participants develop a teaching portfolio that both represents and reflects on their teaching experiences. Michigan State University also offers a Certificate in College Teaching (www.preparing-faculty.org). The University of Texas at Austin has a Graduate School Intellectual Entrepreneurship Program that is built extensively on the University of Texas PFF program. This program offers 16 cross-disciplinary professional development classes, several workshops, and a variety of interdisciplinary doctoral portfolio programs (www.preparing-faculty.org). By contrast, Vanderbilt University offers the Future Faculty Preparation Program, which is self-directed for any Vanderbilt Teaching Assistant and post-doc interested in academic positions and seeking teaching-related consultation. Only recently has Vanderbilt offered a Certificate in Teaching Program, where admission is by application. Some institutions offer departmentally based versions of PFF programs, and others offer various elements of PFF programs. A commonality among all PFF programs is that they are voluntary and competitive, as participants must apply or be nominated for inclusion. The exception is the University of Missouri-St. Louis' CUT program, where participation is free and open to all graduate students regardless of whether they are currently teaching or not. This practice aligns with the university's mission that education should be inclusive and accessible to all students. The implication of this practice, however, is that participants may not be as motivated to fully

invest themselves in the program because they are not paying any sort of tuition. Further, the program itself is somewhat limited in scope because there are few funds to support its maintenance.

Literature on TA training and development and preparing future faculty is now widely available and can be defined as informative, theoretical, and much less often, evidence-based (Schonwetter, Ellis, Taylor, & Koop, 2007). Institutional programs are documented through individual university websites and handbooks, as well as PFF and POD websites. Journals such as *The Journal of Graduate Teaching Assistant Development* and *To Improve the Academy* inform faculty developers, teaching centers, faculty and graduate students on recent trends in the field. Literature also describes the elements that define teaching in the university course as well as how to design such a course and maintain assignments.

Areas of Focus for Teaching Assistant Training

There are several areas of focus for TA training; one that has been carefully studied is the stages of TA development. Nyquist and Sprague (1998) identified three phases in the path to becoming part of the professoriate: 1) senior learner; 2) colleague-in-training; and 3) junior colleague. According to Lewis (2002), one of the benefits of thinking about these stages is that it helps supervisors plan TA assignments and how to best move them through their graduate programs (See Chapter Six for a more detailed discussion on these phases).

One of the challenges of training TAs is their varied teaching experience. In any given group, some may have teaching experience at the elementary, secondary or community college levels; some may have no teaching experience; and some may have

had TA training during their M.A. program. “Not only do TAs enter at different levels, but, obviously, they grow at different rates in different dimensions” (Nyquist & Sprague, 1998, p. 84). As with any developmental stage, those described above do not necessarily occur linearly. More importantly, as the authors note, growth and development are never finished. TAs benefit most from supervisors who are able to adapt as TAs develop, providing more supervisory support in the beginning stage and scaling back as TAs mature (Nyquist & Sprague, 1998; Wulff, Austin, Nyquist, & Sprague, 2001).

Keeping these developmental stages in mind, Nyquist, Abbott & Wulff (1989) argue that TA training should focus on multiple dimensions of the TA experience and on the interrelatedness of those dimensions. The dimensions that the authors refer to include: the needs and characteristics of the TAs themselves, the relationships that TAs have with other TAs, the demands of their students, and the expectations of supervisors, administrators, and instructional developers. In addition, TA socialization (which includes learning the expectations of their new role and making it their own) is an important part of the TA acculturation process and facilitates decisions about the types of training that would be most optimal (Darling & Staton, 1989).

Another area of concern is whether TA programs and courses are teaching enough content. Until 2005, there was no organized research on comparisons of course content in TA pedagogy across institutions (Ebest, 2005). In their extensive research project on 155 Canadian and U.S. graduate courses taught during 2002-2004, designed to prepare graduate students for teaching in higher education, Schonwetter et al. reveal surprising results. They found that a number of common elements within each course could be identified, thus demonstrating a consistency across courses. The researchers were

encouraged that “certain themes are supported, at least to some degree, across each of the three course criteria—the course objectives (knowledge and skill), the course content, and the course assignments” (2007, p. 22). Also significant in the results is that many of the course elements align with the criteria and theories recommended for teaching these courses. According to leading experts, the criteria, which include course goals, objectives, course content, assignments, and potential textbooks are being employed in these courses at the present time (Diamond & Wilbur, 1990; Lewis, 1997; Marincovich, 1998; Vattano & Avens, 1987; Wright, 1989). As a result of the study, there is a better sense of the extent to which such courses actually subscribe to the criteria listed above, whereas in the past, this information was largely unknown (Schonwetter et al., 2007). However, it must be noted that much of the data were gathered from university websites with some voluntary collection of syllabi, rather than with full participation from instructors.

Creating an Effective Teaching Assistant Training Program

Creating an effective TA training program aligns well with a social constructivist paradigm, emphasizing the collaborative nature of learning. An icon in sociocultural theory, Vygotsky argued that learning is not simply the assimilation and accommodation of new knowledge by learners as Piaget posits. Rather learning is described as “the social process by which learners were integrated into a knowledge community” (1978, p. 57). In sociocultural theory, learning is both extrinsic and intrinsic. TA training programs, for example, are often grounded in sociocultural theory, stressing active and collaborative learning through acquiring and using mediational tools such as language.

Both Wulff's *Aligning for Learning* (2005) and Border's *Two Inventories for Best Practice in Graduate Student Development* (2006) are used as models for Teaching Assistant Training programs, including the UMSL CUT program design. The Alignment Model by Wulff is based on his TA case study research in the 1980s on successful university teaching. The Alignment Model is based on the premise that the components (students, professor, and content) and their inter-relationships are always changing and not fixed. For example, the professor's experience in teaching affects the content, and there can be some overlap between students and the course content (Wulff, 2005). From this research, Wulff determined that effective instructors do the following:

- Focus on key components in the instructional process (students, professors, and content)
- Strive to align those key components in the teaching/learning process
- Use four main categories of communication strategies to assist them in developing appropriate interrelationship among the key components. (Wulff, 2005, p. 8)

These four main categories of communication are 1) rapport, 2) structure, 3) engagement, and 4) interaction. Each of these categories interacts with the others as professor-student rapport results in higher teacher trust and a higher level of interaction (Wulff, 2005). Necessary course structure keeps students engaged using various active learning strategies, including collaborative learning, pair work, and student-centered teaching. This holistic approach to effective teaching demonstrates how these factors work together to produce an ideal learning environment.

More specifically, the first element in the model aligns instructors (TA trainers) with student interests (Wulff, 2005). This is accomplished by holding icebreaker activities at the beginning of the semester in which both professor and students participate. Once students and professors have become more familiar with each other, students may be more receptive to learning, more willing to take risks, and more likely to select a suitable professor who shares research and/or teaching interests to serve as a mentor.

The second element in the model aligns professors with content (Wulff, 2005). Professors should recognize their teaching style and consistently reflect critically on their classroom experiences. By using small group work, student presentations, reflective journals, and flexible assignment options, professors ensure that content is varied and engaging for a variety of students. Finally, when professors identify their teaching philosophy, especially on paper, aligning that philosophy with teaching style facilitates continuity and implementation of content. Because less experienced professors are often forced to teach courses outside their area of expertise, it is especially important for them to adjust to the content (Wulff, 2005). This often means doing extra reading and research, and being able to say “I don’t know” when students ask questions, rather than giving a false pretense of knowledge.

The third stage is aligning professors to their students (Wulff, 2005). Professors should recognize and address unease or discomfort that their students have due to course content or performance. Further, professors have to teach and model the differences between theory and pedagogy, illustrating in detail how various learning theories apply to classroom teaching. Professors should be open to student feedback, both informal

(verbal) and formal (written course evaluations), because all feedback serves as an opportunity to revise course content both during the semester and for the next version of the course. Professors should emphasize trust and encourage risk-taking, which builds student self-efficacy (Tschannen-Moran & Woolfolk Hoy, 2007). Using numerous modes of communication allows for easier access to professors' time and availability, and gives more options for feedback. Finally, TA training programs are most successful when choices are available within a basic structure. A variety of components to a program (both non-credit workshops and for credit classes) gives students the opportunity to optimally participate (Wulff, 2005).

The fourth stage is alignment between students and content (Wulff, 2005). Providing opportunities for feedback, including conferences after observations, evaluations following workshops, and verbal feedback when students report, ensures that learning goals are being met, and/or gives professors the opportunity to make alterations to course content and pacing. Professors should acknowledge and praise students' baseline knowledge of the subject matter to support self-efficacy and confidence. By giving students a voice in course content, professors are reinforcing a student-centered pedagogy and contributing to students' development as future faculty. They are modeling the decisions that students will have to make as faculty. Finally, making course content relevant to all students is critical for their engagement. Workshops on the practical application for writing across the curriculum, for example, show students that teaching strategies can be used in all disciplines, even those formerly considered teacher-centered, such as mathematics, history and the natural sciences (Wulff, 2005).

The fifth step of the process is aligning coursework with university context (Wulff, 2005). Assigning a teaching portfolio—a necessary tool for career development—as well as teacher research portfolios, and offering workshops on writing curriculum vitae and letters of application put a professional focus on content. Also by discussing and/or collaborating on grading criteria, students learn the basics of rubric writing and the importance of unified standards for grading. Teaching Assistants learn that by setting realistic (semester-long) goals, they are able to take the program at their own pace. Teaching Assistants are awarded certificates after completing each unit and after completing the program. By assigning an annual deadline for the portfolio, graduate students have more flexibility in completing the work in a realistic time frame (Wulff, 2005).

In sum, Wolff's Alignment Model (2005) extends beyond day-to-day content into concrete learning goals that should be met both during the course and at the course's conclusion. Workshops are structured the same way, with student assessment as key to all learning goals. Instructor self-assessment also contributes to the achievement of these goals. Curriculum changes are guided by the degree of achievement of the learning goals. Finally, achieving these learning goals aligns with general academic standards of most four-year universities.

Assessing Growth

In 2006, Laura Border of the University of Colorado at Boulder developed two inventories for best practice in graduate student development—one focuses on graduate students' preparation to teach during and after their graduate study, and the other focuses on PFF and serves as an organizational development tool for creating and sustaining

inter-campus support networks for future faculty. These inventories were designed to both help faculty developers and campus administration analyze their own TA training programs and PFF programs and to support recruitment and retention of new faculty.

According to Border (2006), best practices for TA development include the following:

1. Administrative Support. Administrative support is crucial to the success of a TA training program because it is at this level that funds are assigned and policy is set. Administrative support means buy-in, which means more support for departmental and campus wide efforts to train TAs.
2. Across-Campus Liaison. A TA trainer who coordinates all campus training to ensure that appropriate theory and pedagogy are taught is ideal for best instruction. However, in the absence of a central figure, faculty in all departments can assist with TA training through centralized activities.
3. Campus-Wide TA Development Efforts. The biggest advantage to a campus-wide TA development effort is to offer training to TAs whose departments offer little to no training or mentoring opportunities. A campus-wide effort also provides continuity of instruction efforts.
4. Departmental TA Training. Departmental TA training programs positively affect all stakeholders involved—including the community and the entire campus (administration, faculty, and students). Further, individual departments are the logical choice for teaching their graduate student assistants how to use the language of the discipline best.

5. Active Faculty Supervisors or Mentors for Graduate Students. Mentoring provides TAs with research and teaching support throughout their graduate school careers. Good mentoring relationships extend into the PFF realm and even throughout a TA's career. This relationship is mutually beneficial to both the TA and the faculty member who serves as a mentor.
6. Graduate Students to Engage in their Own Professional Development. Graduate students must be responsible for their own academic and professional development as graduate students before they transition into faculty roles. This includes understanding the contexts of research, teaching, and service within their own and different institutions.
7. Diversity in Personnel, Curricula, and Programs. Understanding issues of social justice in a university setting is crucial to being an effective instructor. Designing socially just curricula and classroom practice (including grading), as well as being aware of one's own biases all contribute to a better prepared Teaching Assistant.
8. Application of Theory in the Content of TA Development Programs. Understanding educational psychology, or how students learn, helps TAs gain understanding of the basis for student learning (as well as their own) so they can apply these theories to practice. This connection reinforces the idea that educational theory is a legitimate discipline and provides the basis for TAs' metacognition process.
9. Effective Program Evaluation. Periodic program evaluation is key to both summative and formative improvement. The value of such programs to TAs,

the effectiveness of TAs on undergraduate education, and how TA programs contribute to graduate students' career success are all areas where data can be collected and analyzed. (pp. 295-296)

While all of these points are desirable to build a campus-wide TA training program, many programs still lack institutional support, some lack departmental support, and most programs lack the amount of funding needed to run a complete campus-wide effort. This directly reflects the budget cutting and hiring freezes most four-year universities are experiencing.

Teaching Assistant Training Program Components

The non-credit course. The three main components of a TA training program include: 1) the non-credit seminar/workshop, 2) the for-credit course, and 3) mentoring. Advantages of the non-credit option or practicum ensure that many TAs receive training, encouraging a sense of community among TAs, and allowing time to present significant content (Harris-Barnett, 2008). An ideal non-credit unit structure demonstrates a strong balance between pedagogical (planning a course, designing a syllabus, using technology in the classroom, creating a teaching portfolio) and theoretical training (motivation theory, social constructivist theory, and cognitive theory), and reflects an aspect of situated cognition, where students collaborate with each other and the instructor toward a shared understanding (Brown, Collins, & Duguid, 1989). Furthermore, a Practicum offers a form of mentoring and communication between facilitator and graduate student that TAs often claim is the most helpful unit of the entire program. Hoy (2004) found that TAs' sense of efficacy was higher for those who received positive forms of feedback in the Practicum than those who did not. This feedback should promote specific reflection

as dialogue in which both parties are involved in observing, thinking, reporting and responding (Leverenz & Goodburn, 1998), once again supporting the social constructivist paradigm of co-creating knowledge.

The for-credit course. For-credit coursework provides an incentive for the graduate student to receive credit and a grade for his/her efforts and lends legitimacy to TA training programs. The for-credit course can be required of all TAs and can serve as the basis for the TA experience. In programs where such a course is required, students enter their Teaching Assistantship with a base amount of knowledge and experience, unlike programs where TA training is not mandatory (Harris-Barnett, 2008). The for-credit course provides both an intrinsic and extrinsic motivation to TAs in the form of grades and performance, as well as the belief that the course is “more academic.” Intrinsically, students have both the motivation and support to become better instructors. Because the for-credit course meets more frequently, student-student and student-professor relationships are generally more forged than during the workshop model (Lambert & Tice, 1993).

Teaching portfolio. The development of a teaching portfolio that represents change and growth over time is a typical culminating project of a TA training program. This portfolio not only displays a teacher’s experience during the job interview process, but also allows the TA to reflect on and critically examine his/her own development as a teacher. Portfolios are most useful for interviewees at higher education institutions where teaching is valued. Leverenz and Goodburn argue “teaching portfolios are ultimately judged in terms of the degree to which teachers represent themselves as successful, not in terms of growth or development” (Leverenz & Goodburn, 1998, p. 13). They contend

that “while nothing is wrong with self-promotion (it is often necessary to succeed in academic culture), the process of creating and presenting a portfolio that can be used throughout one’s career is a rhetorical act” (Leverenz & Goodburn, 1998, p. 14).

Compiling such a portfolio allows TAs to reconsider their work in new ways and serves as the most comprehensive evaluative tool for the faculty member.

Finally, in their text *Situated Cognition and the Culture of Learning*, Brown, Collins, and Duguid (1989) contend that one of the four ideas of the situated cognition movement is “learning and enculturation” (p. 2). This means that students learn a common language or genre as well as what legitimate and illegitimate behaviors are in an expected learning environment. TA training programs provide an acculturation for graduate students as they learn to navigate through the pedagogical terminology and appropriate behaviors of a college instructor. This is a socialized activity with many other players (undergraduate students, peers, faculty, administration, and sometimes those outside of the institution—i.e. parents). Learning about teaching is situated in a very specific environment—a group of Teaching Assistants who share common issues. TA programs can be most supportive when addressing graduate student concerns in a safe environment. This ongoing informal negotiation phase is as valuable to the TA as the more academic aspects of a training program.

Chapter Three will introduce the methodology used in this study, focusing on CUT participants’ narratives as texts to be interpreted. Their stories add a dimension of depth to the academic constructs of the TA training program.

Chapter Three

Methodology

In this chapter the methodology of the research is discussed, including research design, participants and sample, sampling procedures, instrumentation, data collection procedures, data analysis, and limitations of the study. My study is a basic qualitative design with elements of action research that involves a recursive cycle of observation, reflection, and action (Pine, 2009). It includes data collection, analysis, affecting classroom change, and evaluation (Manfra, 2009). Because of the multiple roles played by me in the CUT program, the study does revolve around improving my own practice. However, there are also feedback loops and analyses of student artifacts that focus more on evaluating outcomes for CUT participants as well as examining participant growth, so both teaching and learning aspects of CUT are examined. My methodology is grounded in data from my participants.

The purpose of this study is to evaluate the relationship between university Teaching Assistants' participation in the Certificate in University Teaching (CUT) program and their classroom experiences and practices teaching undergraduate students. To review, the research questions are as follows:

1. What do graduate students report they are learning about teaching in the CUT program?
2. To what extent do Teaching Assistants increase or decrease their teaching self-efficacy and self-awareness of growth as a result of participating in the CUT program?
3. How might the CUT experiences and curriculum be improved?

Previous studies have not provided a micro-analysis or ethnographic look at how the components noted in the literature to support TA development actually play out in a situated context.

Research Design

Action research. Reason and Bradbury describe action research as “a participatory democratic process concerned with developing practical knowing in the pursuit of worthwhile human purposes, grounded in a participatory worldview...It seeks to bring together action and reflection, theory and practice, in participation with others, in the pursuit of practical solutions” (2001, p. 10).

The systematic process of conducting action research has four parts: 1) gathering the data, 2) analyzing the data, 3) communicating the outcomes, and 4) using the outcomes to work toward resolution or improvement (Stringer, 2008; Kemmis, 1995; Susman, 1983). During all of these phases, self-reflection is a significant part of the action research process. As an originator of traditional action research, Lewin, a German social and experimental psychologist called it “a comparative research on the conditions and effects of various forms of social action and research leading to social action” (1946, p. 35). While the action research model can be used in other disciplines to explore a problem, it is often utilized in the field of education. Educational action research is a concept developed from the work of Dewey (1966), who believed that professional educators should become involved in community problem-solving. While teachers had dialogue around classroom-based inquiry as early as the mid-1960s, a shift in focus to scientific-based research overpowered this interest in practitioner-based methods (Manfra, 2009). Cochran-Smith and Lytle noted a “paradigm shift in researching,

teaching, and assessing writing that evolved in the 1970s and 1980s” which signaled another direction for action research (1993, p. 6). Trends included the development of conceptual frameworks of action research and their critiques (Cochran-Smith & Lytle, 1999).

More specifically related to my work, Mills defines action research as “any systematic inquiry conducted by teachers, administrators, counselors, or others with a vested interest in the teaching and learning process for the purpose of gathering data about how their particular schools operate, how they teach, and how students learn” (2003, p. 4). Action research focuses on the development of curriculum, professional development, and applying learning in a social context. “No longer just a technician in the classroom, the action researcher evolves into a decision maker, consultant, curriculum developer, analyst, activist, school leader” (Cochran-Smith & Lytle, 1999, p. 17).

I have the potential to effect change in my role as action researcher by not only helping participants improve their teaching skills, but also by making suggestions for program improvement that can positively influence future directions of the CUT program. The recursive process of observation, reflection, action, and evaluation (Figure 3.1) was repeated throughout this study as I interacted with participants in different environments and in several ways as I played varying roles from observer to leader. It also illustrates a parallel action research cycle of the Teaching Assistants in the study, depicting a two-level action research process.

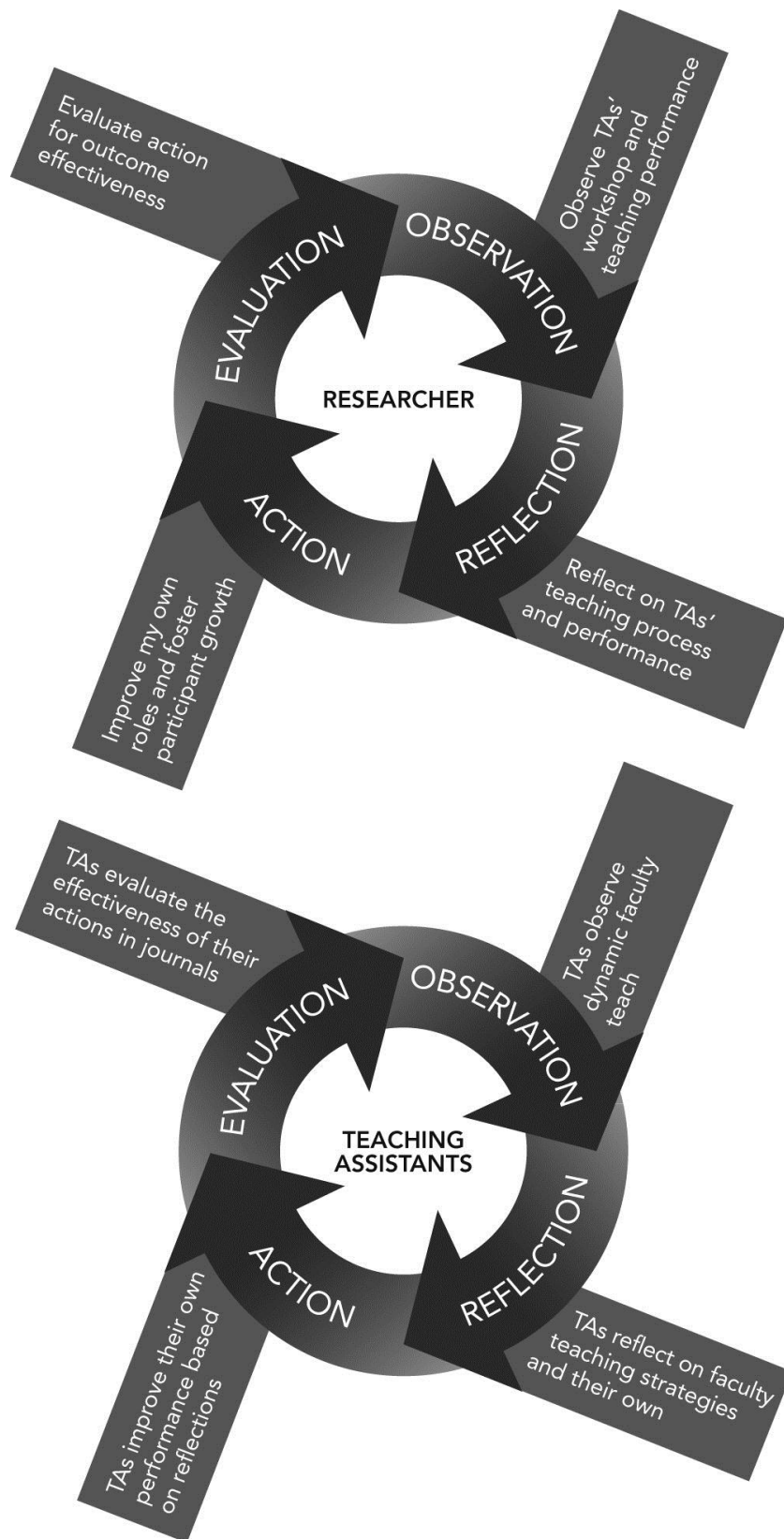


Figure 3.1. Action Research Study Cycles of Researcher and Teaching Assistants.

Figure 3.1 illustrates the action research cycle as it applied to my study. I engaged in a recursive cycle of 1) observation, where I examined Teaching Assistants' workshop participation and teaching performance; 2) reflection, where I considered Teaching Assistants' teaching and learning processes and performance; 3) action, where I sought to improve my role in the CUT program as instructor, supervisor, and mentor as well as TA outcomes; and 4) evaluation, where I assessed my actions for outcome effectiveness. Simultaneously, Teaching Assistants were engaged in their own recursive cycle of 1) observation, where they watched dynamic faculty teach across the curriculum; 2) reflection, where Teaching Assistants contemplated on faculty teaching strategies as well as their own, thereby developing their self-awareness of growth; 3) action, where many TAs attempted to improve their own teaching performance based on their own reflections; and 4) evaluation, where TAs assessed the effectiveness of their actions in their teaching logs. This recursive cycle allowed many of the Teaching Assistants the opportunity to not only strengthen their metacognitive skills, but to develop a sense of self-efficacy as they experienced significant moments of new understanding of their teaching, as evidenced from their teaching logs and interviews. Both Teaching Assistants and I continued to engage in parallel cycles throughout my study. Changes in my approach to participants and alterations in curriculum were informed by the cyclical nature of the action research process.

Participants. Forty TAs participated in various phases of the research over nine semesters. According to demographic data collected (see Appendix E), research participants represent the following fields: Political Science, Philosophy, History, Sociology, Biology, Education, English, Business, Communication, Psychology, Math,

Gender Studies, and Nursing. Approximately half of the participants were doctoral students; the others were master's degree students. There were 11 males in the study and 18 females (of those who responded to the demographic data survey). The age range of the sample was 21-55+ years old with the majority under 30 years. Twenty-one participants identify as Caucasian; five as African-American; five as Asian; one as Hispanic; and one as multiracial. Forty seven percent of Teaching Assistants enrolled in the CUT program over nine semesters had no prior teaching experience; only 20 percent had one semester of prior teaching experience. Also significant is that 55 percent of all Teaching Assistants enrolled in the CUT program had no prior teacher training. Fifty two percent of Teaching Assistants were responsible for teaching one section of a course; 34 percent were responsible for teaching two or more sections. Eighty seven percent of CUT participants were planning on a career in teaching and/or academia; nine percent were not; and three percent were undecided.

The sampling strategy used was purposeful criterion sampling, which is particularly useful in studying education programs (Gall, Gall, & Borg, 2007). Purposeful criterion sampling seeks to ensure that the diverse perspectives of people likely to affect the issue are included in the study (Stringer, 2008). In using a criterion sampling strategy, I originally sought participants who met the following criteria:

- Participants must complete all four units of the CUT program
- Participants must either be the instructor of record for at least one section of a course or have full classroom responsibilities as a discussion section leader for a minimum of two semesters

- Participants must also demonstrate a willingness to discuss their teaching as part of in-depth interviews

However, this is not the sample I actually worked with due to the complexity of the program itself. First, I lost two of my original participants because of attrition in the first semester of the study. Some participants moved through the program within a year while others took longer (two years) to complete the program. As a result, this affected the frequency with which I interacted with some participants; I got to know some fairly well in a short period of time. Furthermore, I collected data from some participants who did not function as instructor of record; these participants served as Writing Lab tutors, Supplemental Instructors, and participants who led class only for the period I observed because they had no other teaching opportunities in their own departments. I decided to collect this data during the study while I assisted and directed the Practicum, because these instructional situations provided valuable information on how participants' teaching improved over a semester.

I worked with three levels of participants. Level 3 (L3) included those Teaching Assistants I worked with in the Practicum, both in observing their teaching and communicating weekly for a semester through their teaching logs and who I interviewed at the beginning and at the end of their Practicum experience. Level 3 consisted of nine participants. Level 2 (L2) consisted of 14 participants whose teaching logs and teaching performance I evaluated, but who I did not interview. Level 1 (L1) included all of the participants who attended CUT units 1, 2, and 4, but who neither took the Practicum nor participated in personal interviews. This group varied by bi-monthly workshop and unit; therefore, attendance was not always consistent because participants could miss one

workshop of the units 1 and 2 without penalty. About 17 additional graduate students (some were TAs; some were not at the time they took CUT) participated overall in L1. Participants who attended one of the CUT workshops at the annual Graduate Student Conference for Professional Development in August were excused from attending the same workshop held during the semester; participants were also absent due to personal reasons; and some participants attended Unit 1, 2, or 4 or a combination, but not all three units. I did not interview any of these participants, nor did they participate in Unit 3, the Practicum. The data I collected from this group included field notes and workshop evaluations. My involvement with these participants was more limited than with Level 2 and Level 3 participants. Sample size breakdown is summarized in Table 3.1 and academic discipline breakdown in Table 3.2:

Table 3.1

Breakdown of Study Sample Participants

Participant, Level	Discipline and Degree	Year
P1, L3	Education, Ph.D.	2007
P2, L3	Sociology, Masters	2008
P3, L3	Sociology, Masters	2008
P4, L3	History, Ph.D.	2008
P5, L3	Biology, Masters	2008
P6, L3	Psychology, Ph.D.	2008
P7, L3	Political Science, Ph.D.	2008
P8, L3	Sociology, Masters	2009
P9, L3	Education, Ph.D.	2009
P10, L2	History, Masters	2010
P11, L2	Art Education, Ph.D.	2011
P12, L2	Biology, Masters	2011
P13, L2	Political Science, Ph.D.	2010
P14, L2	Political Science, Masters	2010
P15, L2	Chemistry, Masters	2011
P16, L2	Sociology, Masters	2011
P17, L2	History, Masters	2010
P18, L2	Gender Studies, Masters	2009
P19, L2	Philosophy, Masters	2009
P20, L2	History, Masters	2009
P21, L2	Education, Ph.D.	2009
P22, L2	English, Masters	2009
P23, L2	Biology, Masters	2009
P24-40, L1	Various disciplines, population not fixed; not always active	Fall 2007-Spring 2011 varying by workshop and semester

Table 3.2

Summary of Participant Involvement by Discipline, L2 and L3 only

Discipline	Participant Number
Education	3
Sociology	4
History	4
Biology	3
Psychology	1
Art Education	1
Chemistry	1
Gender Studies	1
Philosophy	1
English	1
Political Science	3

Procedures. Data collection sources included the following: interviews, both intake and exit (Appendix C and D), teaching observations (Appendix B), program observations, teaching logs, and workshop evaluations (Appendix A). A self-efficacy scale was administered to Level 2 and Level 3 participants, but this data was not reported because it was not tied to individual participants. Data collection procedures are summarized in Table 3.3.

Table 3.3

Data Collection Sources and Procedures

Sources	Procedures
Interviews (L3) A total of 18 interviews were conducted (9 participants x 2 interviews each)	Semi-structured, conducted at the beginning and end of the CUT program; participants were audiotaped for transcription and coding (Appendices C and D)
Program Observations (L1,L2, L3)	Field notes taken at every session of CUT Units 1, 2, and 4 from Fall 2007-Fall 2009
Teaching Observations (L2, L3)	Participants were observed three times during a semester for a class period using an observation protocol (Appendix B) and then given written and verbal feedback at a conference following each teaching session
Document Collection (L2, L3)	Participants submitted course syllabi and assignments for evaluation throughout study
Teaching Logs (L2, L3) (A total of 15 entries for and spring semesters; 8 for summer semesters)	Participants submitted their weekly teaching journals written during the Unit 3 Practicum for evaluation
Participant Evaluations (L1, L2, L3)	Evaluations were distributed at the end of each two-hour workshop for all units to determine the value to participant

To ensure trustworthiness in observation evaluations, some of the teaching observation data was also scored by the CUT Coordinator as we both visited Teaching Assistants once during the Practicum through the spring 2009 semester. Teaching observation data was analyzed individually and then was compared to corroborate evidence. To further ensure trustworthiness in data analysis, multiple sources of information for each participant were analyzed and compared for accuracy. Participants' teaching logs were shared over a semester long period between the Teaching Assistant and me, creating an ongoing back and forth dialogue on paper and an opportunity for the

L2 and L3 participants to review their own words on a weekly basis and clarify any thoughts if they wished to do so. Finally, my prolonged observations of the participants ensured that they had opportunities to explore and express their experience and situated me in their setting (Stringer, 2008). Both my observations and interviews were systematically and carefully conducted using protocols (see Appendices B, C, and D). In I used audio-recording during interviews and I ensured an audit trail for all data collected.

Table 3.4

Data Collection Timetable and Roles Played

Semester	Role	Data Collection/ Action
Fall 2007	Observer in workshops	Conduct interviews Take field notes
Spring 2008	Participant-observer in workshops Assist Practicum Observe students' teaching and give feedback	Conduct interviews Take field notes
Fall 2008	Teach workshop: <i>Ensuring Social Justice</i> Direct Practicum	Conduct interviews Take field notes
Spring 2009	Assist Practicum Teach workshop: <i>Civic Engagement</i>	Conduct interviews Take field notes
Summer 2009	Direct Practicum	Conduct interviews Take field notes
Fall 2009	Teach all of Units 2 and 4 Direct Practicum	Conduct interviews Take field notes
Spring 2010 - Summer 2011	Direct Practicum Teach workshops: <i>Ensuring Social Justice</i> and <i>Civic Engagement</i>	

As shown in Table 3.4 above, my involvement in the CUT program increases over time. In the first semester as I began data collection, I observed the unit workshops

and facilitator-student interactions while taking field notes. Toward the end of that semester (fall 2007), I started conducting participant interviews. The following semester I observed Teaching Assistants in their classrooms and gave them feedback on their classroom performance.

The following semester I continued to conduct interviews, and took field notes of the workshops. In fall 2008, I taught my first workshop on *Ensuring Social Justice* that I designed based on my interest and doctoral study in that area. In summer 2009, I taught Unit 3: The Practicum, and expanded my teaching in fall 2009, when the program facilitator went on academic leave. Therefore, I had full responsibility for the CUT program for the semester. During this semester, I kept a reflective log of my CUT teaching experiences, significantly increasing my role in the program from my first semester's involvement as an observer only. For the remainder of the study, I directed the Practicum and continued to teach the workshops on *Ensuring Social Justice* and *Integrating Civic Engagement into Your Courses*, as well as teaching other two-hour workshops on an as needed basis for the CUT Coordinator.

My increasing involvement as an insider in the CUT program over time reflects the nature of this multilayered research design, which is “part of the social and educational world that is a messy place, full of contradictions, richness, complexity, connectedness, conjunctions and disjunctions” (Cohen, Manion, & Morrison, 2007, p. 166). Furthermore, this multilayered design allowed for the cycles of observing, action and reflection to repeat themselves throughout the study.

Ethical Issues

In an action research project in which an insider takes on the role of researcher he/she also acts as the change agent (Hammack, 1997). Nolen and Putten (2007) note that these potentially conflicting roles can confound the individual's primary objective in the classroom or school: student learning. Mirvis and Seashore (1982) claim that most ethical dilemmas in such students arise "not because the roles are unclear, but because they are clearly in conflict" (p. 87). I felt this potential conflict most directly when I taught/directed the Unit 3 Practicum and I interviewed participants during the same semester (spring 2008-fall 2009). I was responsible for observing and giving verbal and written feedback to Practicum participants on their teaching three times during the semester. Though I was careful to give a balance of positive comments and constructive criticism to each participant, I felt somewhat awkward switching roles to become an interviewer. This required me to ask some probing questions about their educational beliefs in general and of the CUT program, and I was concerned that participants would not feel comfortable sharing such insights when just weeks before I had given them teaching feedback from a position of authority. The act of being observed, often as an inexperienced teacher, and then receiving comments, can easily leave a participant feeling vulnerable. I was acutely aware of this possibility and I attempted to make participants comfortable with my tone and with reassurance. I reinforced this message just prior to the start of every participant interview. I continually asked myself, how am I presenting myself as an action researcher?

Williamson and Prosser (2002) pose three ethical questions of action research:

1. If researchers and participants collaborate closely, how can confidentiality be preserved?
2. If action research is a 'journey' and 'evolves,' how can informed consent be meaningful?
3. As action research can have political consequences how can action researchers avoid doing harm to participants?

In order to avoid participants identifying themselves and others in the study, they were given pseudonyms. Disciplines were disclosed in this study because they have relevance to participants' educational backgrounds and teaching experience. It may be possible for participants to recognize themselves, but much more difficult to identify peers.

Coghlan and Shani (2005) note that while neither I as action researcher nor my participants know in advance where the journey will lead us, they cannot realize exactly to they are consenting. However, participants could expect that I stated in clear language (both written and verbal) the purpose of the study on the Institutional Review Board (IRB) participant informed consent letter, providing realistic expectations of procedures and involvement.

The risk was minimized by reassuring graduate students that their participation was voluntary and data was kept confidential. While most participants are now out of the university, to ensure anonymity there is a two-year delay in making this dissertation available for publication. Furthermore, participants were instructed that they could end their participation at any time without professional or academic consequences. It was also important to convey to participants that my feedback on their teaching performance in no

way compromised their graduate Teaching Assistant positions, and was not shared with their department chairs, as noted on the consent form.

The data collected in this study was stored in two ways: 1) a password-protected computer folder that was set up on my personal computer only; and 2) audiotapes and paper files stored in a locked drawer. IRB approval was granted in August 2007 for this study and renewed annually. In addition to the participants' potential vulnerability to be part of the study, there were other minimal ethical risks associated with this study, including a slight incursion on the participants' time and asking them to reflect honestly on what teaching strategies worked and did not work for them in participant interviews.

Data Analysis

Interview and observation data. Interview transcripts from participants were examined through narrative analysis (Bruner, 1987) and grounded theory (Glaser & Strauss, 1967). Charmaz states that grounded theory “serves as a way to learn about the worlds we study and a method for developing theories to understand them” (2006, p. 10). While Glaser and Strauss contend that theory emerges from data separate from the scientific observer, Charmaz disagrees, claiming “neither data nor theories are discovered. Rather, we are part of the world we study and the data we collect. We construct our grounded theories through our past and present involvements and interactions with people, perspectives, and research practices” (2006, p.10). This idea also resonates with a Vygotskian sociocultural worldview. I locate myself close to Charmaz in that I was so invested in the CUT program and its participants that I do not think it is realistic to completely “approach the data with an open mind, devoid of preconceived notions” as Glaser and Strauss stress (1967, p. 60). Dey (1999) notes that

there is a difference between keeping an “open mind and an empty head” (p. 251). I could still remain open to emerging themes and patterns. In fact, it is my relationship to the program that allowed for a deeper understanding of the data.

In *Life as Narrative*, Bruner offers a constructive approach to narrative since “world making is the principal function of the mind, whether in the sciences or the arts” (1987, p. 691). A narrative framework has four categories: 1) orientation, which describes the setting and character; 2) abstract, which summarizes the events or the incidents of the story; 3) complicating action, which offers an evaluation on the events, conflicts, and themes; and 4) resolution, which describes the outcomes of the story or conflict (Mishler, 1986).

Narrative analysis or technique differs from grounded theory in that it does not discuss coding strategies (open and axial coding), and instead focuses on the temporality and sequencing of storied experiences or the use of language (Floersch, Longhofer, Kranke & Townsend, 2010). In the social sciences, narrative analysis is used to make sense of the human experience. In my research, narrative analysis was used to interpret problem solving, conflict, and interpersonal relationships of the CUT participants as they experience what it means to become a teacher.

However, there are tensions between grounded theory and narrative analysis. Riessman (1990) argues that the grounded theory process does not respect the interviewees’ portrayal of their stories because coding, finding common themes, and drawing relationships between those themes fracture the data. The researcher is challenged to make meaning of the data while staying true to the ordered nature of storied events. Narrative analysis allowed me to examine the dimension of time, which grounded

theory does not. Analyzing participants' narratives as text resulted in a richer and more complex understanding of time, place, and setting within this TA program.

Procedures. The following procedures were used to analyze my data:

1. Line-by-line descriptive open coding of data content, where I looked for phrases or key words that were significant
2. Axial coding, where I identified larger categories of codes, then made individual subcategories, specifying how they relate to one another, and developing a code book with definitions for each term (See Appendix F)
3. Elaborating on the relationships between codes and categories; then organizing that data into an emergent theoretical network of relationships
4. Examining participant interviews holistically as narratives to compare possible similarities and differences

In addition, observations of the relationships and interactions among stakeholders (defined in Chapter One) were analyzed through a lens of symbolic interactionism to determine how the CUT program participants and coordinator engage in social transactions and how those transactions “contribute to the creation and maintenance of social structures, namely university culture, and the individual’s self-identity” (Charon, 2000, p. 36). Symbolic interactionism assumes that people construct selves, society, and reality through interaction (Charmaz, 2006). Participants’ meaning-making processes as a community of practice influenced their actions as instructors, and how they learned from participating in the CUT program. The relationship between the meaning-making process and one’s teaching behavior directly relates to my research questions.

Limitations

In a long-term study, attrition is likely to occur, and in this study, did occur. Two participants selected for full interviews and observation left the program mid-semester. Finally, my own teaching philosophy and preconceived ideas about what the CUT program should look may have interfered with considering all possible interpretations of data. However, to maintain a façade of neutrality prevents a researcher from ever examining his or her own assumptions or personal experiences (Rubin & Rubin, 1995).

Chapters Four and Five will present the data findings from this study, including an examination of those CUT participants who embraced the program and were open to change, and those participants who resisted for various reasons. Their stories provide a greater understanding of the challenges facilitators face in training graduate students to teach, as well as representing their experiences authentically based on interviews and observations as an action researcher. Ultimately, analyses and reflection on data led to formulating a Learning Continuum Taxonomy introduced at the conclusion of Chapter Five.

Chapter Four

Learning in the CUT Program: The Improvement Continuum

Chapter Four addresses Research Question #1: What are students learning about the teaching process in the CUT program? Workshop Evaluations (WE) provide information on how important various CUT topics were to participants. Participant teaching logs as well as participant interviews gave more detailed insight into how participants view their own learning and teaching within the CUT program.

CUT participants completed surveys (see Appendix A) at the end of each two-hour workshop in CUT Units 1, 2, and 4. Participants were instructed to fill out an evaluation of the session and place them face down on a table as they left the room. Every so often a participant would leave a workshop early or leave without completing the evaluation. On average there was 99% participation, though comments were mostly brief and inconsistent. The evaluation format was a combination of three Likert scale questions and open-ended responses on the effectiveness of the day's workshop session. Workshop evaluation data provides a framework for examining participant teaching logs and interviews.

Participants rated each individual workshop overall as informative (question 1), relevant (question 2), and/or useful (question 3). On a 5-point Likert scale (5: very helpful to 1: not at all) these three questions generated an average score between 4 and 5 for every workshop, indicating that participants found workshops to be helpful in developing their teaching styles. See Tables 4.1-4.3 below for the sample, mean and standard deviation of a representation of workshops (on a 5-point scale) in each of the CUT Units 1, 2 and 4:

Table 4.1

CUT Unit 1 Post-Workshop Evaluations

Prompts:	Teaching Observation Reports I			Teaching Observation Reports II			Preparing Resource Portfolio		
	<i>n</i>	\bar{X}	SD	<i>n</i>	\bar{X}	SD	<i>n</i>	\bar{X}	SD
The program was informative	16	4.56	0.62	11	4.00	0.63	18	4.83	0.38
The topic was relevant	16	4.56	0.62	11	4.55	0.52	18	4.72	0.46
The information was useful	16	4.56	0.62	11	4.20	0.60	18	4.83	0.38

Note: Evaluations used a five point scale.

These numbers show a slight dip in the number of participants for the second workshop on Teaching Observation Reports in CUT Unit 1. Further, the mean illustrates that participants found the second workshop less useful than the first workshop on *Teaching Observation Reports* and the third workshop on *Preparing Teaching Resource Portfolios*.

Table 4.2

CUT Unit 2 Post-Workshop Evaluations

Prompts:	Motivating Your Students			Grading		
	<i>n</i>	\bar{X}	SD	<i>n</i>	\bar{X}	SD
The program was informative	11	4.36	0.81	14	4.64	0.49
The topic was relevant	11	4.45	0.82	14	4.71	0.47
The information was useful	11	4.45	0.82	14	4.71	0.47

Table 4.2 Continued

CUT Unit 2 Post-workshop Evaluations

	Improving Your Writing			Writing Across the Curriculum		
Prompts:	<i>n</i>	\bar{X}	SD	<i>n</i>	\bar{X}	SD
The program was informative	8	4.25	0.46	14	4.64	0.49
The topic was relevant	8	4.25	0.70	14	4.71	0.46
The information was useful	8	4.38	0.74	14	4.71	0.46

These numbers show an inconsistency in attendance among the four CUT 2 workshop sessions represented above. The mean for the four workshops shows that while *Improving Your Writing* was the least helpful to the participants; overall, all of the workshops provided relevant and useful content to participants.

Table 4.3

CUT Unit 4 Post-Workshop Evaluations

	Developing Your Academic CV			Preparing for Job Talks and Interviews			Finding and Getting Grants		
Prompts:	<i>n</i>	\bar{X}	SD	<i>n</i>	\bar{X}	SD	<i>n</i>	\bar{X}	SD
The program was informative	9	4.56	0.62	10	4.9	0.31	8	4.63	0.74
The topic was relevant	9	4.66	0.62	10	4.9	0.31	8	4.75	0.71
The information was useful	9	4.44	0.62	10	5.0	0.00	8	4.63	0.74

These numbers show high positive means for each of the workshops, which is not surprising since graduate students report these workshops as the most helpful and

applicable to them, especially for students who are not teaching during the period they are enrolled in the CUT program.

Some cautionary notes must be made in conjunction with the workshop evaluations—these evaluations were administered during the last five minutes of each two-hour workshop, and I observed many students rushing to complete them and leave, although this does not mean that participants were unable to articulate their opinions in that time. Rather, it means that there may be more to the story than just the brief comments written for the open-ended questions. Issues of CUT evaluation are addressed in Chapter Six.

The open-ended questions yielded more descriptive participant responses. Questions included: “What were the most important things you learned?” “What information will you apply to your teaching?” “In which areas would you like additional help or more information?” “What suggestions do you have to improve the program?” Responses for the first question generally related to the topic for that specific workshop. For example, on the CUT 2 surveys, the most common response to the question “What were the most important things you learned?” from the session on *Motivating Your Students* was “motivation theory,” “bad teaching motivational styles to avoid,” and “motivating the students and learning theory” (WE, 2008). In the CUT 2 workshop on *Writing across the Curriculum* the most common responses to the same question were “various ways to effectively create writing assignments,” how to encourage writing in all subjects,” and “the advantages of incorporating writing into curriculum” (WE, 2008). This indicates that participants found the individual sessions provided value related to the topic being addressed.

Responses to the questions “In which areas would you like additional help or more information?” and “What suggestions do you have to improve the program?” provided more specific comments. Responses fall into the following categories: guidance, examples, and feedback.

Guidance

Participants wanted more help on areas ranging from professional development to teaching issues to CUT unit deadlines. These requests were asking for additional guidance.

- Knowing how to interact more with other faculty (WE, 2008)
- Guest speakers who can discuss their teaching methods (WE, 2008)
- How to actually put together the portfolio and what it should look like (WE, 2009)
- More guidance on where to search (WE, 2009)
- Give an outline of what the resource should be (WE, 2009)
- What to do about extension requests and late papers (WE, 2008)
- How to write a respectful proposal even if you are suggesting to overturn other people’s work (WE, 2009)
- Outline for all units on each date—I’m confused at times (WE, 2008)
- How to get discussions back on topic without being rude (WE, 2009)

Examples

Participants asked for additional information and resources in their responses as well:

- Give an outline of what the resource should be (WE, 2009)
- Examples/stories of other professionals and their experiences applying and interviewing for jobs (WE, 2008)
- Have a sample of a great vita that everyone can copy and follow (WE, 2009)
- Strategies to present a united methodology (WE, 2010)
- Sample grant proposals (WE, 2009)
- More examples of simple, intermediate, and difficult assignments (WE, 2008)
- Would like to see a video of great teachers in action and then make explicit exactly what they were doing and why it worked (WE, 2009)
- Examples of syllabi and language that are included in documents from different disciplines (WE, 2008)

They requested additional examples of assignments, good teaching, syllabi, CVs, and grant proposals to use as models. They wanted more models to help them produce appropriate documents and to demonstrate what strong teaching looked like in the classroom. All of these suggestions show that participants want to succeed in their professional and academic careers and that more examples would help them to achieve this.

Feedback

Participants were able to identify areas they wanted clarification on and ways in which to improve workshop content:

- Feedback on my CV (WE, 2009)
- Everyone should get to make a presentation and get critiqued with a rubric provided (WE, 2009)
- More feedback on grading specific papers (WE, 2008)
- More feedback on my teaching portfolio (WE, 2009)

These categories show an equally divided interest in the areas of guidance, examples, and feedback. Further interpretation of these categories reveals that participants are indirectly saying, “Tell me what to do and how to do it” (guidance), “Give me the information and I will figure it out for myself” (examples), and “Tell me what I’m doing right and tell me what I’m doing wrong” (feedback). These messages convey that CUT participants have varying learning needs at different times. Some participants processed information more independently than others; some asked for more feedback, particularly on how to write specific documents.

Based on my observation experiences and encounters with participants in the Practicum, the most feedback was requested on the Philosophy of Teaching Statement. Writing this document requires participants to incorporate educational theory with their own emerging pedagogical practice, and this is most difficult for inexperienced teachers. Participants are reminded that this document, as with many of their portfolio documents, are works in progress and will develop over time as they gain professional experience. Other areas of more requested feedback were grading and the teaching portfolio. It should

be noted that the degree of feedback received in CUT workshops depended on how much advance preparation participants did—if a participant brought a draft to a workshop, feedback was given; without a draft, verbal suggestions were made to help the participant get started. Still, the request for more feedback shows that some participants felt they needed more input from the TA Coordinator in particular areas.

Overall, the primary message from the above data is that although CUT participants were generally satisfied with the CUT Unit 1, 2, and 4 workshops, examination of the themes shows that participants wanted additional information in the form of guidance, examples, and feedback. Chapter Six will address how this need might be achieved.

Additional Data Sources

Next, I coded CUT participants' teaching logs and interviews to further answer Research Question #1: "What are students learning about teaching in the CUT program?" I arrived at the category distinctions by conducting open and then axial coding, which identified three emergent themes: 1) strategy, 2) theoretical framing, and c) self-efficacy. This chapter will discuss the emergent themes of strategy and theoretical frame; I will analyze the self-efficacy category in Chapter Five.

I further divide the categories of "strategy" and "theoretical framing" into student-centered and teacher-centered sub-categories to distinguish between strategies that are based on teacher-centered practice versus strategies that are based on student-centered practice. Based on the coding of teaching logs and interviews, a total number of 121 codes were identified (see Appendix F); they were then combined into the three categories (as seen in Table 4.4).

Table 4.4

Breakdown of Data Codes

Coding Category	Number of Codes
Strategy	66
Student- centered	40
Teacher-centered	26
Theoretical Framing	27
Self-efficacy	28

Theme 1: Strategy

Strategy is a significant category because it represents how CUT participants are thinking about the various teaching strategies presented in Units 1 and 2, and how they are being used in Unit 3, the Practicum. Descriptors in the teacher-centered sub-category include the following areas: a) pedagogy, b) lecturing, c) study guide questions, d) rubric, e) “drill and kill,” f) attendance points, g) debate format, h) conduct the review, and i) switch up the format. Descriptors in the student-centered sub-category include: a) discussion session, b) free writing assignment, c) student journals, d) brainstorm, e) small group work, f) active learning exercises, and g) reflective reading. All of these descriptors show that there is discussion among CUT participants that strategy holds some value to them either in the classroom or in the CUT workshop or both. Dialogic learning increases teaching options and deepens reflection. Ways in which strategy is used will be illustrated in the case studies presented in this chapter.

Theme 2: Theoretical Framing

Theoretical framing as a category refers to the various learning and motivation theories that CUT participants learn and refer to throughout the program and that are then applied to pedagogical choices and decisions. Related codes in this category include a)

theories, such as positivism and social constructivism, b) critical thinking, c) fallacious argument, d) historical context, e) philosophy statements, f) cognitive learning theories, and g) ethical theories. These are the ways in which CUT participants frame their pedagogical choices and how they shape their developing ideologies. CUT participants' use of theoretical framing will be demonstrated in the case studies presented in this chapter.

Narrative Analysis

After examination of the above emergent themes, I reasoned that there was a richer way to illustrate what and how participants are learning in the CUT program. The participants' teaching experiences, my observations of those teaching experiences, their teaching logs, and our conversation tell deep stories of life experiences and social selves. In *The Narrative Construction of Reality*, Bruner argues that humans "organize our memory and our experience of human happenings mainly in the form of narrative—stories, excuses, myths, reasons for doing and not doing, and so on" (1991, p. 4.). Further, the pathway to teacher knowledge is built on the act of reflecting on one's own experience, which is one of the purposes of writing the teaching logs (Schon, 1987). CUT participants engage in meaning making through written reflection; narrative analysis of that text is a way of understanding the Teaching Assistant's experiences holistically.

Upon close examination of my participants, I realized that some of them shared experiences and/or characteristics that if grouped together, would best illuminate their stories and their improvement on a learning continuum. These groupings represent the continuum from slight learning to significant learning. For example, Kristen and Andrew, who overcame difficult circumstances, each had less than ideal teaching assignments.

Kristen had only three opportunities to teach all semester, which meant it was difficult for her to become comfortable in front of her class with so few opportunities to do so.

Andrew served as a tutor, and he struggled with low attendance and a special needs student. Yet both of these participants overcame their difficult teaching circumstances.

Mike, Kevin, and Scott, as another group, all had difficulty putting theory into practice. They appeared to gain benefit from the instruction in CUT workshops, but when each of them taught, they struggled to use the strategies they had previously learned.

Adam and Amy were eager to please—they were compliant, always pleasant, and took every suggestion made throughout the Practicum and applied it in their classrooms.

Connie, Hillary, and Judy had strong content knowledge. Each of these women had prior teaching experience and they were confident in their subject matter. Cathy and Susan had strong voices, and these voices shaped their teaching personas in the classroom. Each individual, though part of this community, had an original story to tell which comprises part of the CUT learning continuum landscape. Each of these clusters represent a patterned way that CUT experiences were negotiated.

The categories of strategy and theoretical framing are interwoven through each individual case study below. CUT participants refer to these various strategies and theories in their teaching logs and in conversations as part of their expanding discourse and understanding. Both categories of strategy and theoretical framing are best represented in context through the case studies that follow.

Overcoming Difficult Circumstances: Kristen and Andrew

Kristen (L3). Kristen joined the CUT program in 2008 and took the Practicum in 2009. She was a master's degree student and TA in an introductory social science course,

where her primary duties were assisting the professor with online students during the lecture period. Kristen's professor allowed her to teach three discussion sessions with an average class size of 20 students in person and an additional 15-20 online. She also offered this opportunity to four other Teaching Assistants who did not have their own classrooms and were enrolled in the CUT program.

Both Kristen and Andrew faced pedagogical challenges during their Practicum experience. Kristen dealt with several obstacles: 1) she taught only three times during the entire semester so any opportunity for improvement was stalled because she was not teaching on a regular basis; 2) the professor she worked for remained in the classroom while Teaching Assistants taught and often interjected commentary, undermining their authority and contributing to their nervousness; and 3) half of the class was physically present in the room and the other half was online at the same time, so Teaching Assistants spent considerable time dealing with the technology issues throughout the class period while trying to engage the students who were in the classroom.

Kristen's minimal involvement in classroom activities was evident in her teaching log comments throughout the Practicum (TL, 2009). She writes: "In class I am responsible for keeping the online students on track and paying attention... Other than that, I try to stay out of classroom going ons." After two teaching logs, Kristen was directed to discuss "what YOU would do differently" in the classroom, rather than merely summarizing her professor's in-class activities. In her next journal entry, Kristen remarked, "I would implement a way to make the students a little more accountable for their readings. Some of the issues that stem from the professor's classes are that the students do not do their readings." She began to offer a suggestion that the professor

improve student accountability, though she did not offer any specific suggestions toward achieving this.

The TA Coordinator further prompted Kristen with questions in response to her weekly journals: “So it would remain teacher-centered in the classroom, right? Or do the students discuss their activities and writing?” These questions were meant to direct Kristen toward thinking about concrete ways to implement active learning strategies that she could use when she had the opportunity to lead a class session.

I observed Kristen’s class discussion, her first time leading the section that semester. In her teaching log, she wrote, “Honestly, it did not go that well. I felt nervous. I talked too fast and tried to cover too much material. I felt like the class was a bit of a blur. I was underprepared.” In her observation report, I wrote, “Be careful that you know the content of what you are teaching. You do not appear to be prepared with notes or an agenda of what you planned to do in class. Make sure your time is structured and that you have enough exercises for students to complete in class.” Kristen wrote referring to me: “She gave me helpful and constructive advice that I will use for my next class.”

Kristen improved considerably in her next teaching opportunities. Following a class discussion she led on religion, Kristen said,

My goals for this class were to discuss the three theoretical perspectives on religion, the basic definitions of the types of religions and to discuss religion at a social level and not personal level. I used several active learning strategies to implement this: video, freewrite, small group discussion, pair and share, interactive quiz between small sections of lecture. All activities worked well, it

was hard to get them started, but by the second activity they were no longer fighting against not doing what they are used to.

First, Kristen had defined goals for this class session, which she did not have the first time she taught. Second, she used multiple active learning strategies to engage the students during this class, and planned specific activities for each one, whereas the first time Kristen taught, she did not have any activities planned in advance. Finally, Kristen recognized that students' initial resistance to the activities was a result of being lectured to by the professor every week.

In an interview with Kristen at the end of her participation in the CUT program, she said: "I feel pretty good about teaching individual classes, but not to prepare an entire course. It's beyond my ability at this point. I feel really good in class talking to students and I feel able to lead discussions to all students." She admitted that she "had no confidence at all at the beginning," and although Kristen still did not feel comfortable teaching an entire course on her own yet, she knew that she had come a long way in developing some teaching skills.

Andrew (L2). Andrew was a graduate student in natural sciences and was not a Teaching Assistant during the time he was enrolled in the CUT program. He attended the various units over a period of three years but did not take them consecutively. The semester Andrew took the Practicum, he worked as a tutor in his own small section of a general science course for biology majors. Unlike Kristen, Andrew was not enrolled in another CUT unit simultaneously and therefore he was not actively engaged in the discourse of the program. Andrew had not taken an instructional CUT unit for one

semester prior to enrolling in the Practicum due to scheduling conflicts, so he was not able to process his teaching experience with his peers while he was actually teaching.

Andrew was self-motivated as he made arrangements to serve as a tutor for a professor's general biology course. As stated earlier, Andrew had not been enrolled in a unit of CUT for over a year, yet he noted in his first teaching log for the semester that he "reviewed all of the CUT materials and read about CRISP [Contextualize, Review, Iterate, Summarize, Preview] from online sources" (2011). Because Andrew was running a tutoring session for general science students, his biggest obstacle was attendance. He held these sessions weekly. In his teaching log, Andrew informed me that the tutoring sessions were semi-regularly announced in the lecture class, but that he often had only one student in attendance who was hearing impaired and required a lot of additional time. Further, the fact that Andrew had not attended an instructional CUT unit in over a year may have affected his ability to immediately recall strategies that he could utilize in his tutoring sessions.

I observed him three times during the semester: the first time he had one student; the second time, two students; and the last time eight students, presumably because there was an exam the following week. He reported an average of 2-5 students per tutoring session. If Andrew was frustrated with the lack of attendance, he did not show it in the classroom.

Early on in the semester (week 3), Andrew reported using a "collaborative strategy in which the student and I worked to a solution together." He was prepared to use a "pair and share strategy if I have more than one student." Andrew used a variety of learning tools in his tutoring sessions: PowerPoint slides, YouTube videos, writing

paragraphs, quizzes on definitions and concepts, whole group discussion, flashcards, and mnemonic devices.

Andrew spent a fair amount of time tutoring a hearing impaired student who had fallen behind in the course. Andrew tutored him privately once a week in addition to his other duties, although this presented some challenges for him. They communicated sitting side by side using the Word program on their computers. Andrew prepared a detailed slide presentation on one of the lectures for his student early in the semester. “For John I will make a PowerPoint presentation showing the step-by-step construction of new DNA. I suspect that normal hearing students will also benefit from this presentation. I don’t like doing this project because it’s a lot of work for me and a very passive activity for the students, but I’ll do it this one time only.” Andrew was so sensitive to John’s impairment that he wrote, “DNA replication is a challenge for people that can hear explanations; I imagine for Steve it is at least twice the challenge. I looked at You Tube videos with the sound volume off and they were useless.” Andrew was committed to helping John; however, I cautioned him against this student monopolizing his time and energy since Andrew was showing signs of stress.

Several weeks later, Andrew admitted: “For John, PowerPoint presentations showing the step-by-step processes of transcription and translation would have been useful but, honestly, I was worn out from constructing the first presentation.” As the semester progressed, Andrew prepared students for their exams and balanced individual sessions with John. In retrospect, Andrew figured out on his own what strategies to use to best help John and prepare sessions for his class sessions. I realized that I did not give enough credit to Andrew for being able to attend to differing students’ needs. Perhaps I

should have talked to Andrew more about the positive side of meeting a variety of students where they are in the learning process, rather than caution him about time constraints. I think my desire to protect inexperienced TAs contributed to my response in this situation.

I observed Andrew run a review session using several of the learning strategies he wrote about in his teaching logs. In my observation notes to him, I wrote: “You ran an interactive review session for your students. My main suggestion for improvement is to make sure that when you are unsure of an answer or how to explain the process to get there, that you follow up with your students rather than simply say, “I don’t know.” Still, Andrew used several appropriate learning strategies throughout the semester in his tutoring sessions, where he was faced with consistently low attendance and a student with special needs who needed time and attention. Andrew drew on the materials and previous CUT instruction to connect with students’ learning needs despite attendance and time challenges.

Difficulty Putting Theory into Practice: Mike, Kevin, and Scott

Mike (L2). Mike was a master’s student and Teaching Assistant for four discussion sections of an introductory history survey course during 2009. Mike was enrolled in CUT Unit 2 during the time he took the Practicum, so he had the opportunity to engage with other Teaching Assistants in the program to share strategies and ideas on a biweekly basis. From the beginning of the semester, Mike was dismissing his students about 10-15 minutes early from a 50-minute class session. He wrote in his teaching journal:

The other three groups were finished less early than the first because there were still some people without books, but I am still concerned that they are getting out too early. I had a list of questions that applied to all sources like ‘Who was this written for?’ ‘Who wrote this?’ and ‘Why did they write it, etc.’ but I still did not fill the class time. I am not sure whether I could be more prepared or if there is a method to get the students more involved.

He reiterated his concern two weeks later: “I am worried that it is not just a matter of a few people not wanting to do the work, but there is something I could be doing better.” Although Mike reported that his professor told him he was doing a good job (even though he hadn’t actually observed Mike teach), I was concerned by his comments that while he used the correct terminology for teaching effectively in his logs, he wasn’t seeing positive results, based on his teaching log commentary.

I first observed Mike in the sixth week of classes, which was the standard for the first classroom visit. I observed a generally disengaged classroom of 16 students, two of whom were texting during class and another who had a laptop out and was on a social network site. I encouraged Mike with the following comments:

You have a great class structure for active learning—a small group—and an excellent discipline, which lends itself to exploration. There is a lot you can do with your class—put them in small groups, have a handout with prepared questions for each group to work on, and intermittently have whole class discussion while you move around the room facilitating. I don’t think students were engaged as they could be—a few participated, but most were quiet. Let’s

move toward more active learning exercises as soon as possible, and I think you will see a positive difference in your classroom.

Mike wanted to improve the quality of his discussion sections—this was evident in his teaching logs and in our conversations during the CUT 2 sessions, which I taught that semester. He intended to take one of my suggestions—conducting a peer review of papers—by “breaking them up into groups of two or three according to who has a full rough draft and who has a thesis or outline.” Although Mike grouped students according to their paper topics after they shared them with the class, he did not interact with them at all during the session. I commented in my observation, “I think it would be more effective for students if you stood up and walked around the room—more interactive than you staying seated throughout class discussion.” Mike struggled with connecting to his students during the semester, and while he appeared to be a strong listener, there was little exchange between his students and him during the class sessions I observed. Further, he appeared to lack confidence in putting theory into practice—he would recognize teaching strategies in our CUT sessions, but had difficulty enacting them in the classroom.

Yet, Mike’s perception of his discussion groups differed from mine as the semester neared completion:

The past week was the last meeting for my discussion groups this semester and instead of the small group work that we have been doing the last several weeks I decided to give them a few questions I came up with about the readings for a free write. All of the discussion groups responded to it very well and I got a lot of great answers from people who typically did not talk much in the large group

discussions, which makes me think I should integrate this into classes I teach in the future.

Mike began to make choices that showed his confidence level rising; however, it took him almost an entire semester to move toward a more interactive classroom. He concluded, “This semester has been very beneficial to me as a teacher because I’ve learned so many new techniques and had the opportunity to test them out. I have definitely gained a lot more confidence as a teacher.”

Clearly, Mike believed that he had learned a great deal from his experiences as a Teaching Assistant, which prompted me to reconsider his progress throughout the semester. Yet there was a disconnect between what I observed in his classroom and Mike’s own perceptions of his teaching performance. I reasoned that Mike did actually make progress from the beginning to the end of the semester, although it was at a slower pace than I expected. In addition, Mike’s history professor for this course lectured every class period and never deviated from that structure, so he had no modeling experiences. For Mike, his difficulty putting theory into practice could have been a confidence issue. He needed encouragement, time, freedom, and authority to implement new strategies in small increments.

Kevin (L2). Kevin was a political science Teaching Assistant who took the Practicum in 2010. He taught two discussion sections of an Introduction to Political Science course that was led by a well-known professor in the community. Kevin consistently wrote short teaching logs that lacked descriptive information on his classroom procedures and activities. Furthermore, he developed a rather ambivalent tone in his teaching logs that was present for much of the semester:

Started off on the wrong foot. Stayed up very late the night before working on an assignment for my statistical policy analysis course. Furthermore, the room we have for this section is buried in the interior of Benton Hall and has a poorly working air condition [sic] and no windows, only the neurotic flicker of overhead neon. We got through the class, but it was challenging. We started with a free writing assignment, and it kinda flopped. The rest of the class went, but it was generally a bad vibe.

Kevin did not discuss ways in which he could have improved upon the difficult class period he taught, and unfortunately this pattern continued during the semester:

To be completely honest, the current lesson covers the institutional arrangements and technical procedures of Congress, although important, as a graduate student of political science my focus is completely on international relations, so I can understand if they think this is boring, because frankly, so do I.

Kevin's ambivalence toward preparation and teaching was clear from the following statement: "Again some of the students didn't show, blaming their absence on confusion about the process. Not really sure how I could have made it anymore [sic] clear. If the idea of meeting in a different location for one session completely befuddles you, maybe university is not where you need to be." I was concerned about these comments in combination with the fact that on the occasions that I observed Kevin, he used one CUT strategy for the second and third visits and none for the initial visit. He mainly relied on lecture, and students were disengaged. I wrote in his teaching log,

Your students did not appear to be paying attention to you today—several students were doodling, two were using their cell phones, one was sleeping, and I

did not see a single student taking notes. Please consider using active learning strategies to motivate your students and to encourage them to interact with each other and with you. I would like to see evidence of this on my next visit.

Although Kevin did attempt to use freewriting and pair-share work with some reported success, I saw evidence that Kevin may have been overwhelmed with his teaching responsibilities. Interestingly, he noted several times throughout the semester that his students were “all pretty burnt out,” and I wondered if Kevin felt the same way based on his lack of complete effort. I suspected that Kevin’s difficulty in putting theory into practice was a combination of unrealistic expectations of his students’ performance, not preparing enough varied activity for each class period, an ambivalent attitude toward teaching and his students, and his own disinterest in the subject. Although Kevin was polite with me and seemed appreciative of my visits and feedback in his teaching logs, unlike Mike, he did not discuss in our meetings or in his logs that he would use any of the strategies taught in CUT beyond the Practicum semester. I was not convinced that Kevin believed in these strategies or would use them in his future teaching career.

Scott (L2). Scott was a Teaching Assistant in the Philosophy Department and was the instructor of record for an introductory course on the philosophy of religion during 2009 when he took the Practicum. Scott was a pleasant and compliant participant in the CUT program; he was also quiet. I was not certain how this personality trait would transfer into the classroom.

Scott taught a small class of five undergraduate students. He reported using some CUT strategies on the first night of class in his teaching log: students sat in a semi-circle to “encourage dialogue and to prevent texting,” students interviewed each other, and

students did a freewrite on what they expected from the course. But by the second class, Scott resorted to lecture the entire class period. He wrote in his teaching log: “Amidst all the details, I continually tried to summarize/remind them of the big picture. I am not sure whether this was helpful or frustrating for the students (whether it seemed redundant).” I responded to his comments: “Again, I think you should ask them to summarize too—this is a more active strategy than you just lecturing to them.”

I observed Scott teach in the third week of class (since this was a summer school course and a shortened semester, I visited earlier than I usually do). I noted in my observation that Scott was prepared with a teaching plan for the class period and he knew the subject matter well. However, I wrote that “there is not much interaction with students and you are doing a lot of pacing. You are also doing a lot more talking than the students; what can you do to involve them in more dialogue?” I suggested that Scott allow students to take turns reading aloud instead of him reading and then to discuss the material in chunks in pairs. I gave him specific strategies and encouragement both in writing and verbally in our debriefing session following my observation. Scott continued to mainly lecture throughout the semester, even with my suggestions. He wrote in his journal,

I was less pleased with this class than I was with the others. I am not sure exactly what it was about the class that bothered me. Perhaps I wasn’t as comfortable with the material. Better yet, I knew the material, but I don’t think the students were fully appreciating it. At the end of the regular lecture time, I told them what I expected them to know from the day’s lecture—just the big points.

It did not occur to Scott that perhaps his students were not “appreciating” the material because his classroom was teacher-centered. Yet for this same class period, Scott reported that there was class participation, although he did not specify what type. He said, “Maybe it had something to do with the content. On the other hand, a class activity may have helped.” Scott frequently realized that CUT strategies could work, but it was usually mentioned in his logs after the class period was over. Further, he reinforced Freire’s (1970) *banking concept of education* by telling his students what he “expected them to know” from his lecture.

Scott continued to recognize what he should have done in class: “After having them work more independently, I could have had them work together to see if they could properly understand the argument by working as a team. Instead, I did all the work for them...I just spoon fed them.” In that same log, Scott reported: “We went over the handout together and considered why we should accept each premise. This also would have been a good opportunity to give them a chance to write and think critically.” In an earlier teaching log Scott stated: “I try to begin each class with questions to get the students talking. However, I realize now that there are better ways to engage the students than to simply ask them questions.” In that same log, he wrote: “Later in the class, I gave another handout. I read it. Again, I should have let the students do that. And rather than spending the majority of the time lecturing, I should have opened up the floor for discussion and a problem solving activity.” Later that week, Scott admitted: “About 2/5 of the class was devoted to reviewing for the next day’s test. Basically, I opened up the floor for questions. Of course, I answered them. I should have let the other students answer...having more of a discussion format.”

It was apparent that Scott knew that he could use student-centered teaching activities in his classroom, but even when he attempted to plan them, he reverted to some form of lecturing to his students. While Scott's course on the philosophy of religion was an excellent environment for discussion, he had difficulty putting theory into practice while he was actually teaching. Scott was able to identify some strategies in his teaching logs so he was learning, although he wasn't able to apply them in the classroom. Based on the self-deprecating tone of his logs, I concluded that Scott may have lacked the self-efficacy to attempt any form of strategy other than lecture. Still, Scott showed some understanding of the strategies taught in CUT as evidenced in his teaching logs.

Eager to Please: Adam and Amy

Adam (L2). Adam was a master's student in the history department and a Teaching Assistant for four discussion sections of an introductory history course. He took the Practicum in 2010. Adam was outgoing and friendly, and these qualities transferred into his classroom. Adam never missed a CUT session, and he was eager to do the Practicum. Adam was open to both my feedback and his students' feedback:

I put my usual objectives for the daily class on the board. I asked each class this week first, how they thought the classes were going and second, what each person liked or disliked about the classes thus far. Most of the responses were favorable, as I had anticipated, but I did receive a couple suggestions on having more in depth historical information in the classroom discussions. I appreciated the one or two such responses and addressed them the best I could.

Adam's in-class strategies included using real-world examples for discussion (e.g. the stoning of a 13-year-old girl in Afghanistan), journal writing, debating, outlining and

diagramming with student involvement, and discussion (small group and whole class).

Adam's journals were consistently detailed and insightful. I had a complete picture as to what he was doing in his classroom as well as how his students responded, according to Adam. One of Adam's challenges, he reported, was keeping pace with the professor's lectures—at times Adam was one chapter ahead.

Adam demonstrated his understanding of connecting theory and practice in this teaching log entry:

Though I divided the room in half for folks to take sides and laid down ground rules for discussion, three of the four classes were almost completely silent on the issue with the exception of a handful of folks who carried the conversation.

Everyone knew of the Mosque issue so this was not a matter of understanding but this seems to have been an issue of people feeling uncomfortable expressing their opinions...I led the conversation as an outside observer and completely unbiased only asking questions to get the students thinking 'why' they believed things the way they did. This was really an exercise in critical thinking.

In my class observations, Adam effectively used the same teaching strategies he wrote about in his logs. He was prepared, confident, and relaxed in the classroom. I wrote: "You did a fantastic job teaching today. You are engaging, focused, organized, and impart knowledge. Wow!" Adam interacted with all of his students by walking around the room during paired discussion of their response papers offering comments and answering questions. I suggested to him that students should trade papers and give each other comments rather than just sharing their own ideas, and he followed up on that idea at my next observation.

Adam responded favorably to my feedback throughout the semester, and although at times he reported frustration with students' poor exam grades, he continually attempted ways to reach his students with often large amounts of material. Adam was genuinely interested in improving his own teaching, as evidenced from our debriefing sessions, his teaching logs, and our numerous informal conversations in other CUT units.

Amy (L2). Amy was a Teaching Assistant for two introductory to biology laboratory sections and took the Practicum in 2009. Amy was quiet in CUT workshop sessions, but very polite and accommodating. She submitted substantial weekly teaching logs throughout the semester to the TA Coordinator. Amy had issues with students misbehaving in lab, leaving class early, and dealing with broken equipment (e.g. microscopes and measuring tools) and she sought feedback on how to deal with these problems. The TA Coordinator suggested that Amy enforce participation points and move from group to group in a timely manner during lab to ensure that students were actually working during that time. Amy did see improvement after several weeks:

Students were very good about finishing their dissections. I know it's partly because the threat of losing participation points looms over them, but it makes me happy to see them not rushing out the door after glancing at the model dissections.

The TA Coordinator positively responded: "Good, you're teaching them to act like college students. You are learning a lot about effective teaching and classroom management." While Amy could not do anything about the broken equipment other than alert her professor—which she did more than once during the semester—she was able to effect change in her classroom. I visited Amy at the end of the semester, and I observed that I mostly saw teacher talk, but it was necessary to explain the lab procedures and

introduce the material. In my observation notes I wrote, “I would suggest having each student in each group take turns note taking so one person covers every station. This will ensure learning and help them to articulate understanding and ask questions.”

I paid careful attention to how Amy presented herself to students—she was soft-spoken; she looked and dressed young, and she was small in stature. I questioned whether some of the problems Amy experienced in her lab—especially the misbehaviors—occurred because students had difficulty perceiving Amy as an authority figure. Amy wrote that she was not as clear to her students on her expectations as she should have been, and this did not help her establish authority at the beginning of the semester. Still, Amy showed considerable growth throughout the semester:

At the beginning of the semester I was always frustrated when they would just stare blankly back at me and not even open their books. I think I’ve figured out that that’s because I was talking at them instead of really teaching...I think I learned a lot about how to structure productive group work and will know how to do it better in the future. I feel I did a good job of establishing authority while also being somewhat approachable. I learned how to structure a class’s time management and feel that was one of my bigger successes.

Amy was much more confident in her teaching ability at the end of the semester than she was at the beginning of the semester. Much of Amy’s growth can be attributed to the fact that her eagerness to please and improve resulted in strong reflective teaching logs and taking my suggestions and implementing them in the classroom. While Amy encountered a combination of positive and frustrating outcomes from attempting a variety of teaching strategies, she learned from all of her experiences during the Practicum.

Content Knowledge Expertise: Connie, Hillary, and Judy

Connie (L3). Connie, Hillary, and Judy shared commonalities: they were all Ph.D. students in political science, they were all older females, and they had strong content knowledge in their areas. Connie took the Practicum in 2008, when she was instructor of record for a course in judicial politics. At the time of taking the Practicum, Connie was simultaneously teaching, finishing her dissertation, and conducting a job search. Connie got off to a slow start writing her teaching logs and waited until the third week to submit any, which meant she had to backtrack and write the first several from memory. Early in the semester, Connie tried implementing changes in her classroom. She reported 1) cutting some material out of her lectures to “now focus on linking the ideas together to give a picture of how the topic fits into the American judicial system; 2) being cognizant of her fast speech and slowing down, even repeating information when necessary; and 3) rearranging how and where she stood in the classroom, because she admitted that “there is a bit of comfort behind the podium.” She reported sitting on the front corner of the desk as an alternative for discussion.

Connie also noted the importance of using humor and her personality to “help the students be more comfortable about the material and myself.” In her teaching log, she explained that one of her students asked a question using his brother’s arrest record as an example. She responded by “laughing, putting my head in my hands, and asked, ‘Why do you tell me these things?’ The class loved it. I was saying what the rest of them were thinking, this was getting a little too candid.” Based on Connie’s teaching logs and my observations, it was evident that she had a great deal of content knowledge, but less evident was her use of CUT strategies in class beyond basic lecture and PowerPoint

presentations. At times Connie did use discussion, though she preferred whole group over small groups:

I think the larger groups worked better than the smaller ones. The problem with the two-to-three student groups is that the students quickly break down into other topics. Also, one person may come up with an answer and the other will be 'okay' with little or no thought about the answer and how it relates to the question or article. In larger groups, it seems that the students were discussing the topics and ideas more. One student would come up with an answer, and in larger groups, students seem more comfortable saying, 'Well, I see it this other way.'

The CUT Coordinator observed Connie teach a large discussion group and gave the following feedback: "This is a valuable recognition. What really impressed me was how they were now using the vocabulary of the field." She also noted that had Connie used permanent groups at the beginning of the semester, students might have been more comfortable working with each other and sharing ideas.

I observed Connie teach twice during the semester and noted an improvement from the first to second observation: "I really see much more attentiveness and overall participation as a result of discussion and the linked reading/writing assignment." However, I did note that the class was still "mostly teacher talk with students asking questions." While there was a definite improvement over the previous class session I had observed, I thought Connie could work toward less lecture time and more classroom activities. Connie continued to struggle submitting her teaching logs, especially as the semester wound down. She did finish the Practicum, although her logs were shorter and

less frequent. I attribute this to lack of time (she was about to defend her dissertation) as opposed to lack of interest or motivation.

Hillary (L2). Hillary was also a political science Teaching Assistant—she taught two sections of an introductory American politics course and took the Practicum in 2010. Hillary had difficulty with her teaching logs at the beginning of the Practicum. She wrote four-five sentence entries with no reflection, and admitted to me that she was having an issue with the teaching log:

Carolyn, I don't seem to be getting the expectations of this journal. I procrastinated on sending you the last journal entries because I could not decide on what to include. I guess I did not include the right things. I will try better next time, but it has been almost two years since I was in CUT and I am rusty on the terminology.

At first I was admittedly put off. The structure and expectations of the CUT journals are stated online, and I had already met with my students, including Hillary, to discuss the expectations of the Practicum. I felt that our participants should know what to write about at this point. However, Hillary was being honest with me about her concern, and once I realized that she genuinely wanted to do well and was not being negligent, I addressed her concerns and reiterated the objective of the teaching logs as well as the sections we expected to be addressed. Once I explained the goals to Hillary, her journals immediately increased in both substance and length.

After my first observation of Hillary, I gave her several suggestions for improvement, including writing the day's objective on the board (so students could focus

and contextualize), assigning a writing activity to complete during class, and developing an assessment for the group project. In her teaching log, Hillary wrote:

I wrote the objective for the class on the board. This was a helpful suggestion since it reminded me to book end the simulation by asking the group if they felt that they now had a better understanding of some of the barriers to the legislative process. After the simulation I asked them to free write about how leadership worked in their groups. What leadership styles did they observe? I am going to count this as successful because a student that does not normally participate contributed on these questions. I also made handouts of the rules and simulation criteria for everyone.

However, in spite of the strategies that Hillary used, she reported having “a rather disappointing discussion section” because attendance was so low that day. Hillary used many of the strategies she learned in CUT, as evidenced in her teaching logs:

The 2 p.m. discussion section went well. I used both of your suggestions. I used the full front of the room to make sure that I engaged all students. This worked well, especially since my regular contributors sit on one side of the room and my non-contributors sit on the other. I think my closer proximity encouraged them to talk.

Further examination of Hillary’s teaching logs revealed that she believed she had many “bad teaching days” throughout the semester due to either poor attendance or poor participation. Hillary wrote,

I had one of the worst teaching experiences this week. The students were so unprepared that I was not able to do an activity and had to lecture instead. I really

hate this, since I think the whole point of the discussion is to do anything but lecture. All that was required was to be present and conscious during the lecture. It was seriously discouraging.

Yet when I observed Hillary, I noted that she not only demonstrated strong content knowledge, but she was engaging her students with small group activities and whole class discussion, including political party meeting simulations, examining public service announcements, a U.S. federal budget exercise, and a game show on understanding political parties. I observed that while Hillary did struggle with low attendance (under 10 students for two of the three visits I made), and one of her students was on a social network website and another was texting on her cell phone, she did command the attention of the class and challenged them to think critically about the material. Hillary was aware of the disengagement of several of her students and took steps to remedy this by speaking with the student who was working on her laptop. Hillary reported that this student did not return to discussion the rest of the semester following their conversation, nor did the texting student. I reminded Hillary that she could not presume to know their reasons for leaving her discussion section, and not to take their decisions personally.

It was clear to me that Hillary's content knowledge helped her design learning activities for her students that asked them to incorporate the professor's lecture material and Hillary's additional material for understanding. Hillary decided that she was going to tackle low attendance issues in the future by asking her students to be more accountable:

If I am the TA for this course again next semester, I am going to use your suggestion of having a writing assignment due for each discussion section for

their participation and attendance points. Since it is only a 50 minute class, I am going to post the starting question on Monday, have them work on it before class and then turn it in at the end of discussion so that they can refer to it during class. Then I will review them and make comments and return them so that they can use them to prep for the test. Hopefully they will see the payoff (besides the 1 point) in doing the work.

In my final debriefing with Hillary for the semester, I could see that she felt frustration with what she perceived to be lackluster teaching semester—she had high expectations—but I reminded her of her teaching successes over the progression of the Practicum and that she had learned new strategies and was flexible in using them to fit the constant change in attendance in her classroom.

Judy (L3). Judy was a political science Teaching Assistant who took the Practicum in 2008. Like Connie and Hillary, Judy was older and more mature than the younger Teaching Assistants who were just starting their graduate careers. Judy was responsible for teaching two discussion sections of an Introductory to Political Science course. Her supervisor is a high profile professor in the community and highly structured, but Judy's strong content knowledge and work ethic established her as his go-to person during the two years she taught for him.

At the TA Coordinator's first visit of the semester, she observed that Judy used many CUT strategies successfully: she introduced the day's topic and put the overview on the board; invited undergraduates to a graduate forum; gave a model for the day's assignment; broke students up into dyads for discussion; and praised even the non-answers in her classroom. After reading over the TA Coordinator's notes, I wondered

how Judy could even improve, and it was still early in the semester. I visited Judy about a month later for her second classroom visit, and commented on her evaluation form:

You were very comfortable in front of the class. They seem to respect your authority and knowledge. You walked in with enthusiasm and set the tone for the day. You also had an excellent opening discussion of a current news event and how it applies to course curriculum and you made good use of that time while handing out a lot of papers.

My only suggestion for improvement to Judy was to consider stopping class five minutes before ending time to give a session summary because she generally ran out of time and students rushed out the door, missing important information. This was especially important for Judy's students because she provided so much content in a 50 minute time period that a brief review of key points would be helpful. Judy acknowledged this in her journal: "The second (big) weak point today is that I had to speed talk to cover many things. The pace was too fast for my preference."

Judy was not afraid to redirect her students when they were not paying attention. I observed her asking several students who were not paying attention "to get out a notebook and take notes." She also instructed two students to put their laptops away during class. While Judy was confident coming into the Practicum, she was also humble and considered her position: "I said that as a student I could share with them what I thought might help them the most." Judy was secure enough in her roles as both instructor and student, and did not hide the fact that she was a graduate student from her own students. I observed a poised, extremely well prepared, and knowledgeable woman who balanced a heavy grading load with her doctoral studies. Judy's strong content

knowledge helped her prepare substantial material for each class session and contributed to her confidence in the classroom, although she continued to strive to be a better teacher during the entire Practicum.

Strong Voices: Cathy and Susan

Cathy (L2). Both Cathy and Susan considered themselves as feminists and were vocal and confident in their opinions. Both women spoke in CUT workshops on a regular basis, and their contributions were thoughtful. Cathy taught the discussion section of an Introduction to Gender Studies course and took the Practicum in 2009. Cathy also taught this discussion section the previous semester; therefore, she had some experiences to draw on entering the Practicum. In her first teaching log of the semester, Cathy wrote:

I am (uncharacteristically) optimistic about this semester. I think it is going to be a really good semester. The freewrite seemed to be a good way to get them to start to open up as well as think about the material...I find that I am much more comfortable and relaxed in front of the class now, a definite improvement over last semester...As they raised different issues, I connected the issues to the text as well as to the historical context that Chapter One is largely concerned with. I feel that this is a good way to begin to model higher level thinking, by making connections and supporting issues and observations directly with the text.

Cathy was able to accomplish two things: because of her CUT experiences and because she taught the same content the previous semester, she had a better sense coming into the semester which exercises/strategies would be more effective than others. She was also able to reflect on what she had accomplished in the classroom in a meaningful way just after the first class session, unlike most of her peers, who did not have that skill so

early in the Practicum. Cathy reported tweaking many of her lessons the second time she taught them by using several active learning strategies, including more follow-up questions for writing, pair work, interactive online activities, applying current events, and acting in play scenes.

Cathy was sensitive to the sometimes controversial nature of the material she taught, with which even an experienced professor might have difficulty:

My main teaching goal for this week was to have my students deal with a very personal subject, reproductive rights, in an academic way but also in a way that their personal voices, beliefs, and experiences could be integrated into the academic discourse. When you're talking about women's rights and feminism, it is impossible not to talk about reproductive rights. The problem with teaching this subject is that for many students it is such a deeply held belief that it can be hard to get them to engage with the ideas in the book in anything more than just personal reaction and beliefs...Our textbook, in many ways, implies that to be a feminist (or a women's studies scholar) is to be necessarily pro-choice.

Conservative students have taken real issue with this in the past. Keeping these issues in mind, I had the class work in groups on the day that we discussed the chapter on health and reproductive rights.

Cathy discussed this issue in her teaching log with insight and consideration that her students had different views and backgrounds. This level of insight was unusual for a master's student, but Cathy sustained this awareness in all of her teaching logs for the Practicum. She acknowledged her own improvement areas:

I am still working on re-focusing the discussion. I never want to cut someone off, but we have a few students (and maybe I don't like to cut them off because I tend to talk too much as a student myself—another thing I'm working on).

Cathy perceived that she spoke too much in class, and although she was one of the main contributors in CUT workshops, she certainly did not monopolize discussions. It is unclear why she would feel she needed to “work on” her strong voice, which was an asset to her as both a teacher and a student.

Toward the middle of the semester, Cathy was feeling unwell and reported her struggle in her teaching log:

I continually felt as though so much was going on that I wasn't really able to give as much attention to all these different responsibilities as I normally would. This was just very frustrating for me. Do you ever feel like you just have an off day, and when you do, do you think your students can tell? Watching you [the TA Coordinator] and my other professors, you guys always seem to do a great job, know pretty much everything, and know how to get the class to do what it should. I know you all have been doing this for a buncha many years, but do you ever just feel like a class goes really crappy, and it is your fault?

This journal entry demonstrated a strong work ethic, and a concern for how her teaching performance affected her students. Cathy's comfort level with the TA Coordinator was apparent in this entry, and although she did not explicitly state this in her teaching logs, Cathy considered the TA Coordinator a mentor as well as a supervisor. Cathy's strong voice shaped her effective classroom performance and the high quality of her teaching logs throughout the Practicum. Cathy demonstrated a strong sense of self by

accepting responsibility for both her teaching successes and areas of improvement, and by fully connecting theory to practice in the classroom and in her teaching logs.

Susan (L3). Susan was a doctoral student in education and the instructor of record for an introductory course in methods and another in Teachers of English to Students of Other Languages (TESOL), her area of specialty. She took the Practicum in 2009. Susan warned me at one of the first CUT workshops of the semester that she was apprehensive about taking the Practicum. She confirmed this in her teaching log: “As you know, I was observed this week. After having a number of bad experiences with being observed in the past, my ‘goal’ so to speak, was to stay standing, not throw up, and simply get through the experience.”

Susan admitted being “terribly nervous” for my visit, but reflecting upon the experience in her teaching log, she wrote,

If I could change anything, I would go back and try to relax more. I had no idea that my observation and post-observation experiences could be so positive. I actually left the session feeling more confident in my abilities and excited about the next time I would be observed!

I noted in my evaluation that Susan lacked enthusiasm while she spoke, which I attributed to nerves, but I also observed that Susan had some difficulty communicating her expectations to her students. For example, Susan reported a bad class day in detail this way:

I’d explained the project several times, and there were details in their syllabus (we’d gone over these a few times) as well as a grading rubric. Some felt that the rubric was too general, and they knew that the number of questions at the back of

the syllabus were suggestions, and to answer all of them would take more than the allotted 7-8 minutes. They asked what I thought was most important, and I told them that wasn't really the question they needed to ask, since this was a project designed by the level 1 coordinators and I had to grade according to the rubric—therefore they should be focusing on what the rubric said was key in their presentations. One of my students then said, 'So you mean it should be like our blogs? Those five questions?' This was my biggest failure of the day. I lost it. I didn't yell at him, but I did raise my voice a bit, and said to the class, 'No, those questions are for the blogs, and this is different. Look, we've talked about this in detail for several weeks. It's in your syllabus, and I introduced this project at the beginning of class...I then started listing many of the expectations. Seeing several sets of still semi-glazed over eyes, I asked if that was clear and they assured me it was, until several said that they still had no idea how to do this.

After Susan had time to reflect on her class session's "failure," she realized there was a more constructive way to assist with her students' understanding: "If I could do the class over again, I would probably ask them to work on an outline of their PowerPoint presentations in class so we could talk about their progress and very specific questions relating to these presentations as well."

Susan used a variety of active learning strategies throughout the semester, including icebreakers, role-playing, small group discussion, and presentations. Yet she continued to have difficulty with her students:

The last section, on observation etiquette, did not go as well. I was giving a presentation and a student, halfway back, was talking to his buddy next to him. I

told the class I was waiting, and then after the two finished the conversation, asked if I could continue. The twerp said yes. In the past when I'd done this, while I'd managed to stay calm (like I did this time), the incident was enough to embarrass the student into not pulling something like that again.

Furthermore, Susan reported other incidents where she raised her voice in class. She reasoned, "Overall, I was just really disappointed with the lack of listening going on. I realized that the misunderstanding on the projects might not be my fault in communicating, but that I need to figure out a way to reach some students better."

I suspected that Susan's ongoing struggle with some of her students was due to a lack of quality teacher training (although she had prior teaching experience) and the negative feedback she received on her teaching in the past. Once Susan realized that the feedback given in the Practicum was constructive and not condemning, she was open to our suggestions both in debriefing sessions and in CUT workshops. She improved her teaching skills throughout the semester, but Susan continued to have difficulty at times using her strong voice appropriately in the classroom. Susan made a point of noting the occasions when she spoke too aggressively to her students in her teaching logs—for she did not deny that they occurred. But Susan followed each of these discussions with a deflection of her responsibility for her actions by blaming her students for not understanding her "abundantly clear" instructions or by declaring them immature. It is probable that Susan intimidated her students with her words, and, as a result, they were less likely to seek her clarification on assignments or ask for help. While Susan's confidence may have improved from her prior teaching experiences, she continued to lack awareness of how her strong voice negatively affected her students.

Summary

As shown by the sampling of CUT Unit 1, 2, and 4 workshop evaluations, the numbers reveal a high satisfaction level (4.25-5/5 overall on a Likert scale) with CUT workshop content. Coding of the workshop evaluation written comments yielded the following main themes—1) guidance, 2) examples, and 3) feedback. These themes show that CUT participants have varying learning needs at different times on a developmental continuum. Coding of CUT participants' teaching logs plus individual interviews yielded the following emergent themes—1) strategy, 2) theoretical frame, and 3) self-efficacy. This chapter focused on strategy and theoretical framing; self-efficacy will be discussed in Chapter Five. Strategy and theoretical framing, as identified themes, are explicated in each of the case studies presented in this chapter. Developmental narratives were chosen as the most integrated method to illustrate the categories. All of these CUT participants and Teaching Assistants demonstrated some level of improvement—with considerable variance—during this period.

Narrative analysis of the data revealed that while some Teaching Assistants in this group developed self-awareness of growth through reflection, others still did not develop the skills to reflect on their teaching experiences and/or did not find the value in it. The ability to reflect strengthens one's metacognition and self-awareness, which in turn provides both a more informed use of one's own classroom strategies and a justifiable theoretical frame for teaching. Narrative analysis also showed that learning among these Teaching Assistants occurred in complex ways on non-linear pathways.

Chapter Six will examine two groups of CUT participants—those who were especially accommodating and successful in the program, and those who were most

resistant to content and pedagogical suggestions in their teaching. Furthermore, participants' self-efficacy will be examined as they progressed through the Practicum unit.

Chapter Five

Self-Efficacy and Enactment: High and Low Appropriators

Chapter Five examines Research Question #2: “To what extent do Teaching Assistants increase or decrease their teaching self-efficacy and self-awareness of growth as a result of participating in the CUT program?” Chapter Four examined the middle range of the learning continuum, whereas in this chapter, 11 case studies are presented; four are high appropriators and seven are low appropriators who represent two ends of the learning continuum in the CUT program. Ellen, Nora, Jennifer, and Leah, all women, were enthusiastic about CUT participation and experienced great success in each unit of the CUT program, so they are labeled high appropriators. Matt, Danny, Eric, Lesley, Elliott, Rena, and Beth struggled with program goals in general, including integrating strategies into their own classrooms, completing teaching logs, and participating in CUT workshops, so they are labeled low appropriators. This chapter will examine the reasons why high and low appropriators performed as they did, and how self-efficacy and self-awareness played a role in these participants’ choices.

Personal Construct, Self-Efficacy, and Self-Awareness of Growth

In a previous five-year study of graduate Composition Teaching Assistants, Ebest concluded that the “resistant few were unable to overcome their resistance because constructivist pedagogy contradicted their personal constructs and threatened their sense of self-efficacy” (2005, p. 65). The term *personal construct*, developed by psychologist Kelly in 1955, represents a person’s worldview as he/she understands it. This is formed based on one’s past experiences, one’s relationships with others, and one’s thoughts and actions. The more firmly rooted one’s personal construct is, the more difficult it is to

change. In this study, one's personal construct serves as a lens through which the Teaching Assistants view education, teaching, and their own role in the academic environment.

Self-efficacy, as defined in the literature review, is “the belief in one's capabilities to organize and execute the courses of action required in order to produce given attainments” (Bandura, 1997, p. 3). In other words, people can have control over their thoughts and behaviors, and, therefore, they can motivate themselves to change. People with high self-efficacy strongly believe they can affect change, whereas those with low self-efficacy doubt their ability to change their own behavior. Bandura (1977) divides self-efficacy into two areas—*outcome expectancies* and *efficacy expectations*. *Outcome expectancies* are the belief that a specific behavior will lead to a specific outcome. *Efficacy expectations* are the belief that the behavior can actually be successfully performed to produce the desired outcome. Thus, according to Bandura, “The stronger the perceived self-efficacy, the more likely persons are to select challenging tasks, the longer they persist at them, and the more likely they are to perform them successfully” (1986, p. 397).

The ability to develop self-awareness of growth, in part through the written reflection process, builds metacognition. Having self-awareness also influences the ability to regulate and “goes beyond the strict demands of strategy selection and outcome evaluation in the problem-solving process” (Yeh, 2006, p. 515). According to Lang and Evans (2006), being an effective instructor relies on knowing the subject matter, understanding learning and developmental theory, and having a variety of instructional

skills. Having self-awareness results in the ability to recognize when curricular change is needed and the ability to meaningfully interact with one's students.

The high appropriators discussed in this chapter seemingly shared a strong level of self-efficacy coming into the Practicum, which is why they immediately were able to teach with great skill and confidence, and reflect on their experiences, also with a strong sense of self-awareness of growth. Their personal construct in the area of teaching was highly positive. They truly enjoyed planning challenging curricula and working with their students to create a community of learners. The low appropriators in this chapter are considerably more complicated to pinpoint—there were many reasons why these Teaching Assistants resisted CUT pedagogy. I cannot conclude that the low appropriators had no self-efficacy; it could be that they believed they would perform well in the program and they genuinely thought they did. Based on my interactions with this group, however, including analyzing interview and teaching log data, I have evidence that there were deeper tensions between CUT philosophy and their beliefs about teaching and learning.

This chapter provides a snapshot of a group of high CUT appropriators and a group of low CUT appropriators. Codes developed in the self-efficacy category include a) effective teacher, b) teaching virtues, c) resolving conflict, d) thinking outside the box, e) improving future instruction, f) motivation, g) encouragement, h) confusion, i) inexperience, j) gained confidence, k) frustration, l) aggravation, m) letting go of the reins, n) vigor, o) teaching deficiencies, p) finding a balance, q) critical view of personal growth, r) focus on process, s) unpreparedness, t) worst teaching experience, and u) managing my time wisely. All of these codes appeared in CUT participants' teaching logs

and interviews and referred either directly or indirectly to the construct of self-efficacy.

Narrative analysis will again be used to illustrate holistically the participants' experiences in the CUT program, looking at some of the self-efficacy codes identified.

High Appropriators: Ellen, Nora, Jennifer, and Leah

Ellen (L3). Ellen was a doctoral student in the College of Education. She already had a full-time teaching position at a college in a nearby state, where the TA Coordinator and I twice observed her teach an introductory psychology course as the instructor of record. Ellen's professional goal was to complete her Ph.D. and continue to teach at the community college. Ellen took the Practicum in 2008.

Ellen's classroom management, content, and activities were seamless. Ellen used a combination of question and answer routines to open the class, small group reporting in 10-minute increments, individual presentations with mandatory questions to the presenter accompanied by a rubric, and video clips. She received all "excellents" from both the TA Coordinator and me, with only one suggestion for improvement: "Better to pace reports over several class periods than try to rush them." I noted that Ellen had excellent content knowledge and easily fielded questions from her students; she was very professional and approachable. I also wrote that her students were interested in the material and engaged throughout the class sessions.

Ellen was eager to hold debriefing sessions and receive feedback on her teaching. She was a thoughtful contributor in CUT workshops. Ellen was a high appropriator of CUT strategies because as she said in an interview, "I have used active learning in my courses for some time. The CUT program just reinforced what I already had success with. I have more confidence now that I am teaching effectively." Ellen stated that the nuts and

bolts of learning how to write a syllabus and design assessments in CUT workshops were the most helpful to her as an evolving faculty member.

Nora (L3). Nora was a master's student in the biological sciences and a Teaching Assistant for two sections of an animal behavior laboratory, although she was considered the primary instructor for the course. Unlike her peers, Nora was teaching upper level undergraduates and had previous experience teaching this course. She took the Practicum in 2008. Nora's teaching logs were consistently substantial, and her teaching strategies were plentiful—students went to the local zoo on several occasions to observe animal behavior and complete a project, they conducted experimental activities, participated in peer review sessions, did statistical analysis, and submitted independent research projects. Even during class periods when Nora lectured, she wrote in her logs that she was sure to make them “interactive.”

Nora was adept at planning elaborate lessons and assignments, and without assistance, she knew how to reflect on and improve her teaching. A journal sample follows:

The only downside to this lesson was that students were not able to test their second hypothesis due to lack of time in the class period. This would not have been a problem had I used a pre-designed experiment but I think that the extra time and energy students spent creating their own experiment was more than worth it. If I were to repeat this lesson, I would encourage each group to propose a different hypothesis from one another so that the correct hypothesis would have a greater chance of being tested during class time. In this way, students would still

test incorrect hypotheses and think critically about the preliminary results, but the correct hypothesis would be tested as well.

Nora reported that she was challenged with a student who had an aversion to group work. Whereas an inexperienced Teaching Assistant (and even some experienced faculty) would choose not to confront this student, Nora spoke to her during office hours:

After we had discussed her sources of confusion about the duck project, she began to indicate her discomfort with giving presentations. According to her, speaking out loud focuses her attention of the sound of her own voice, which causes her to stumble over her words. In addition to responding to this specific issue, I also suggested that speaking up in class and interacting with group mates, both of which represent lower stake situations, might allow her to become more comfortable with speaking during a presentation.

Nora received all “excellents” on all three of her teaching evaluations, which is a distinction held for only the participants in the high implementers group. After completing the Practicum experience and upon her graduation, Nora shared her perspective:

I have already felt very comfortable in the classroom. Now I feel like I SHOULD feel comfortable. I want to make sure goals are clear. I feel better grading, making rubrics that are extremely detailed, and this does help with grading. I am a fair grader now, and much quicker. I feel comfortable grading. I am also better at recognizing when students have difficulties. I’m more confident, but will always have to work on it.

These comments suggest that Nora's self-efficacy was strong to begin with, and continued to improve as she finished the Practicum and reflected on her teaching experiences.

Jennifer (L2). Jennifer, a doctoral student in the biological sciences, was an Educational Assistant in the Academic Support Center at a local community college in 2009 when she took the Practicum. As an Educational Assistant, Jennifer was responsible for conducting study sessions for four sections of an introductory chemistry class. She was challenged by four factors: 1) this was a 16-week course condensed into a 6-week summer session, 2) four different instructors taught each of the four sections, which meant that there were likely different ways the material was being taught, 3) attendance at the study sessions was not mandatory and the number of students who attended at each individual session varied, and 4) she did not have her own classroom, and had to conduct these sessions in an open area of the campus Academic Support Center with no privacy and numerous distractions. Even when presented with these challenges, however, Jennifer was a high implementer of CUT strategies in her study sessions.

Jennifer had heard some negative comments about one of the instructors before the course began, and after meeting him, reflected in her first teaching log as follows:

From this encounter, I've realized that I shouldn't make quick judgments about an instructor based on someone else's perspective and experience. It's important that I give instructors a chance in order to build a good rapport and to work with them in unity in order to help students become successful in this course.

Before the first week of classes ended, Jennifer noted that students appeared "frustrated, confused, and overwhelmed." She gave the students an opportunity to vent

and then wrote down their concerns. Jennifer explained, “Throughout my teaching experiences, I’ve noticed that the students put up a roadblock to learning when their voices aren’t heard.”

Once Jennifer reviewed their concerns, she was able to focus her study sessions on the specific areas where they were most confused. Although these were study sessions by name, Jennifer had a developed lesson plan for each session with a variety of in-class exercises and problems for individual, dyad, and small group work.

I visited Jennifer twice during the Practicum because it was a shortened summer session. On both occasions that I observed her, approximately 14 students were in attendance, gathered around a very small space. The barrier separating Jennifer from other students in the Academic Support Center was a long white board on wheels on which she wrote the homework problems. Jennifer received the highest rating of all “excellents” on her teaching both times I observed her. I noted that she was “highly prepared with her materials, handouts and lesson plan” and she had “good use of positive reinforcement” with her students. Jennifer also used a full range of instructional approaches, including visual, auditory, and manipulative.

For her second observation, I noted, “You are professional, knowledgeable, confident, and approachable—a great combination!” When her students were lost or confused, she calmly helped each one individually enough to get them moving forward on a problem. She answered student questions easily and broke down concepts for them while asking for student participation during the process. I was impressed with the way Jennifer handled a sick student who fainted during one of the sessions I observed. She

called for help, made sure that the student's belongings were safe, and continued to teach immediately after the student was cared for.

In all of her teaching logs for the Practicum, Jennifer wrote a paragraph she titled, "Lessons Learned." Jennifer's expertise in the field of chemistry definitely helped her teach the content of the course and show her students practical applications:

At first I was hesitant about telling the students that I worked as a Quality Control Chemist, because I didn't want them to feel intimidated. I'm happy that I took the risk and put myself out there. I wanted the students to get a taste of the tasks lab chemists perform in order to capture their interest in this field. In addition, the students learned the real life application of how empirical formulas of compounds help customers produce common, household products that can be purchased and used.

Jennifer then referenced Wiggins and McTighe's (1998) discussion on authentic tasks, showing her ability to connect theory with practice. Jennifer was a high appropriator of CUT strategies in many ways—she used a variety of active learning strategies in every study session she ran; she scaffolded students at the appropriate level so that when they were struggling, she provided guidance but did not do the work for them; she worked with the instructors of the course to ensure student learning; she was excited about the material and working with the students; she understood that ultimately, the purpose of being an Educational Assistant is to learn how to "form, communicate, and collaborate in study groups so they can do this when they move on to different colleges and careers;" and she reflected on all of her experiences during the Practicum, formal and informal, both her own and her students'.

Leah (L2). Leah was also a doctoral student in the College of Education, and like Ellen, she had prior teaching experience; in addition, she published a practical art education book for teachers. Leah was an accomplished high school art teacher when she took the Practicum in 2011. Leah not only submitted high quality teaching logs; she attached detailed lesson plans every week with a list of materials, concepts taught, motivational activities, procedures, assessment, and student reflection sections. What distinguished Leah from her peers is that she was able to adjust her lesson plans as necessary during instruction (which is a characteristic of a skilled/experienced teacher) (Walls, Nardi, von Minden, & Hoffman, 2002); she engaged in “teacher” language/discourse throughout her teaching logs, during debriefing sessions. In CUT workshops, she outlined specific goals for herself for the Practicum in her first teaching log; she wrote comprehensive lesson plans; she engaged in clear advance curriculum planning; and she was committed to excellent reflective work during her entire CUT experience, not just during the required Practicum phase of the program.

Leah set these personal teaching goals for herself at the beginning of the Practicum:

- To raise my confidence level when working with older students
- To research and implement ways to enhance writing and reflection
- To research and implement ways to enhance creativity in lesson plan preparation
- To show students the relevancy of maintaining their professional lives as artists
- To engage students in what it means to be “professional”

Leah developed these goals on her own with no prompting from the CUT instructors. Her mindset was clear from the first journal entry of the semester: “A mental

note is to always come in high energy myself, as to hopefully pass along that enthusiasm and vigor to my students.” Leah’s positive—actually joyful—attitude at the very beginning of her teaching career, which she maintained as her Practicum experience began, set the tone for all of her teaching experiences and logs for the semester.

Leah was the Teaching Assistant for two sections of an art education course; she also assisted the professor for the weekly class, and often taught small sections of the three hour session. It was evident that Leah’s professor valued her contributions to the class, as she asked Leah to teach at least a portion of the class every week. Leah demonstrated her understanding of the relationship between pedagogy and practice:

From an instructor’s point of view, today’s session was very exciting. From a student’s perspective, it was somewhat nerve-wracking. This is because today was the day in which students were to share their very first collaborative art-based lesson plans...As is the case with most education students, myself particularly, they are always their biggest and worst critics...we don’t want to perpetuate that further with our commentary. Given the time that we have before providing our evaluations, Dr. S and I actually plan to review them and critique our own advice. We want to provide a perfect balance between motivation and encouragement and helpful criticism.

Leah recognized the power of her role as a teacher and she understood that her words could positively or negatively affect a student’s motivation. Leah’s desire and ability to collaborate with her professor as well as her own identification as a student and a teacher, suggests a developing reflective practitioner. Leah utilized important teaching skills during her first full lesson to her students:

I engaged students in a microteaching experience in which I modeled the steps to creating a basic fold book. It was during the second class that I provided more instruction regarding how you could incorporate book elements as a cross-curricular experience, as I found the first group was not making my assumed corrections. After I modeled the book making process, I shared various ideas regarding the content of the book and how that content can connect to other subjects. It was because of their extreme focus and the interest of time that I adjusted my original plan of action. Prior to handing the class back over to Dr. S, I handed out 'Leave it at the Door' forms. This is a device that I also used with high school aged students in which students are prompted to reflect on something new and interesting they learned, in addition to elements that remain unclear and confusing...Overall, I felt my first teaching experience with this group of students to be successful. I would have liked the morning class to go as smoothly as the afternoon session; however, I also need to come to the realization that I am human and am constantly learning and evolving as a practitioner.

Leah modeled a teaching process and shared content ideas with her students for their own projects. Upon realizing that they were running short on time, Leah adjusted her lesson immediately to better accommodate her students' needs, demonstrating self-awareness. Leah then used an assessment tool that asked students to briefly reflect on their own learning experience. In her own teaching log, Leah reflected on her experience, recognizing that imperfections in the classroom are part of the evolution of a teacher. Leah was sensitive to her students' needs at all points during the semester. She mentioned

lifelong learning as a worthwhile goal for her students, which shows a teacher who placed a high value on education.

At one point during the semester, Leah dealt with a difficult student who was unhappy with her evaluation on a teaching simulation and accused Leah of “not liking her and having something against her.” Leah reported maintaining her composure in front of the student and dealt with the situation professionally by saying that “the purpose of the course is to push students to become the best instructors they can be, and in the very end they are graded on their progress over time, not their individual experience scores.” This student did walk out of the classroom in the middle of their conversation, and Leah admitted that she was “a bit shaken up.” But she did not take this interaction personally and concluded that “this experience, although tough to experience at the time, has made me realize that no matter what the circumstance, you can not anticipate how students will react to challenging measures. Every single student is different in his or her own coping mechanisms.” Leah demonstrated composure and maturity in this situation. She did not focus on the student’s comments and talked to her calmly. Admittedly, it is easy to get rattled from a difficult or angry student, but Leah handled the situation as an experienced teacher would and took the opportunity to reflect on it.

Finally, Leah commented on the end of the semester and the Practicum:

I cannot believe how quickly these fourteen weeks have passed. It has been during this time that I feel have truly grown and evolved as an educator. I have learned so much from my mentor in the way of instruction and curricular development. I have learned from my students regarding the ways in which I need to differentiate my teaching style to accommodate their specific needs. I have learned from

myself, now being able to pinpoint my hidden potential and the many ways in which I can continuously grow in my new educational endeavors.

Leah's ongoing reflective discussion in her teaching logs, as well as my observations of her showed a strong teacher with an awareness of her students' needs, the ability to write comprehensive lesson plans including adaptations for differentiation, and a proclivity for reflection and analysis of her own classroom experiences. As Leah's supervisor during the Practicum, I provided more moral support than specific instruction on how to improve her teaching. She needed very little direction, though she sought my opinions on occasion. For Leah, engaging in pedagogical discourse with me both in her teaching logs and in her debriefings following my observations of her teaching was of most value to her. Leah was a dynamic Teaching Assistant who began the Practicum with high self-awareness, as evident from her early teaching logs. Furthermore, she repeatedly demonstrated self-efficacy throughout her time in CUT, particularly the way in which she dealt with a difficult student. In recognition of her outstanding teaching, Leah was nominated for the MAGS (Midwestern Association of Graduate Schools) Excellence in Teaching Award for 2012, for which I wrote her a recommendation.

Low Appropriators: Matt, Danny, and Eric

Ruth Ray (1993), in her study of composition graduate students' introduction to action research in *The Practice of Theory*, argues that students may resist new methods of teaching and research for *rhetorical*, *pedagogical*, or *epistemological* reasons. Students who resist for *rhetorical* reasons often question and challenge new teaching theories in the university classroom. Students who resist for *pedagogical* reasons do not believe that constructivist teaching strategies and active learning activities are appropriate in the

academic classroom. Students who resist for *epistemological* reasons have divergent beliefs about how knowledge is constructed and disseminated. The Teaching Assistants in the low appropriator group demonstrated one or more of these areas of resistance in the CUT program perhaps because CUT goals infringed upon and contradicted their personal constructs.

I asked myself as I reflected on these questions: What differentiated these students from the rest of the participants in the CUT program who did practice accommodation? Why did these students appear to resist and reject CUT principles yet continue to remain in the program? What was my role in their varying degrees of resistance in the program? The discussion that follows will help shed light on these questions.

Matt (L2). Matt was a master's student in the social sciences and originally he took the Practicum during 2009. Like Kristen in Chapter Four, Matt was a Teaching Assistant for a well-known professor on campus, who relied mostly on lecture in her courses. As part of his Teaching Assistant duties, Matt attended all of his professor's lectures and on occasion taught a portion of a class session. Matt did not have the opportunity to teach on a regular basis, nor was his professor modeling student-centered /active learning strategies in the classroom. Matt had already taken the CUT Unit 1 semester-long weekly course for credit taught by the Director of the Center for Teaching and Learning and CUT Unit 2, so he had exposure to the strategies and theory taught in those two units. However, when he enrolled in CUT Unit 2 during the semester I taught it, Matt spent most workshops emailing and surfing the Internet rather than engaging with his peers and the material. I wrote in my notes that "Matt appeared bored and when called on for his ideas, he declined to contribute to group exercises we completed in every

workshop. He knows what the expectations are, so why is he not participating and continuing to come back?”

Matt’s teaching logs were not focused on his professor’s teaching methods or on what Matt would do differently if he were teaching the class as he was encouraged to do. Here is a sample log entry:

The format in which content was presented did not differ from previous class sessions, and as usual, he used introduction, lecture, multimedia instruction, thematic approach, and visual instruction as teaching methods...First, as a sociology student, I have to ask myself, etiologically what are the key variables behind these trends in student behavior I am seeing? Mertonian strain theory would highlight the disjunction between structural opportunities and culturally defined success goals. That is, we are socialized to strive for material accumulation (wealth) as our success status, but amidst our current economic woes, the actual opportunities to work toward a success status are diminishing. Individuals who otherwise would not have returned to the university have returned in an attempt to take courses, earn additional or different degrees, and enhance their resumes. I believe we could point to the larger cultural values of material wealth and immediate self-gratification as cumulative forces shaping classroom behavior.

This particular teaching log and subsequent logs focused disproportionately on the lack of student professionalism and motivation at the university; it also resembled elitism. Unsupported assumptions about the motives of students were rampant. Further, it was also a way to avoid doing the reflection he was supposed to do. Matt was apparently

more comfortable talking about other student performances rather than his own or his professor's teaching performance, which is the purpose of the Practicum. Schon, author of *The Reflective Practitioner* (1987), wrote that the ability of teachers to think on their feet in the classroom was the result of the practice of written reflection. Bishop, author of *Something Old, Something New* (1990), believes that teaching logs serve as the basis for learning, especially for novice teachers. I knew that Matt had high expectations of himself as a graduate student, but I observed a significant disconnect between his scholarly persona and his teaching persona. I wondered whether this was a result of not having any real teaching experience yet or some other cause.

I observed Matt teach a lecture on feminist theory. I found it ironic, not because he was a male, but because he had never before taught this subject matter and only a half class period was set aside to teach this material. Matt delivered a lecture based on his extensive PowerPoint notes. In my observation notes I wrote that he appeared calm and confident. However, there were no activities scheduled for the lesson. I wrote:

I would like to see more interaction between you and students and students and each other. You can't expect them to remain engaged when you are lecturing and they don't have an opportunity to have critical dialogue on the material. We talked about ways you can ask questions, they can work in small groups, and explore some of the issues.

Of the conclusion of the lesson, I wrote, "I'd rather see some concluding remarks than you just running out of time and having to dismiss students. How can you bring the day's discussion to a reflective close?"

During our debriefing session following his teaching demonstration, I thought I was clear with Matt in relaying my concern that the next time he taught, he would use the strategies he had learned, and he appeared to be agreeable. Yet the next week, in his teaching log, instead of discussing his teaching session or his professor's teaching sessions, Matt wrote the following:

As the semester reaches mid-term I am stunned by student 'sign-of-life' postings within the course weekly discussion board forums. Questions are being asked over content that was presented in-class during weeks 1-3. Formal clarifying retorts to those student comments are met with a plethora of logical fallacies. It is quite depressing to my own teaching motivation when students fail to consider the preponderance of available empirical data demonstrating support for a particular stance on a controversial issue. I expect diversity in the classroom, but I also expect logical, objective examination of social phenomena that draws from pre-existing data sets and sociological theories.

Matt used his teaching journals as a forum to discuss his dissatisfaction with his perception of the quality of students he worked with. Matt assumed they were "dumb" because they had perspectives that differed from his own. He did not consider that his professor's and his teaching styles and assessments may have contributed to their students' performances in the course. Further, by referring to the perceived lack of student motivation at length in every journal, Matt avoided reflecting on the teaching environment he either observed or was a part of in each class period. Following what became one of Matt's rants, I asked him in my written comments in response:

Ok, so how do you unpack this? Are students not understanding the requirements? Or are they not doing the work? And why aren't they doing the work? You have to remember that most of these students have not been taught how to critically examine anything, and further, they don't have the experience to know how to do that. Therefore, you have to teach them how to do it, and this takes time and repetition. That is why how you teach is so important—you are giving them tools and a foundation they most likely haven't yet had.

I wrote a second response in one of Matt's later journals that essentially repeated the same message. After another teaching observation mirrored the previous one, I was frustrated that my conversations with Matt, my written comments on his journals, and his presence in my workshops were not impacting him the way I had hoped or expected.

At the end of the semester, knowing that I could not award Matt a Practicum certificate of completion, I wrote him the following message:

I have enjoyed working with you again this semester; however, based on my three observations of your teaching this semester, I don't see evidence that you have applied any of the CUT strategies you have learned thus far (i.e. active learning, collaboration, etc.) During the 50 minutes I spent in today's class, all of it was lecture. I made some suggestions to you after the first and second visits, and I had hoped you would apply them to subsequent class sessions, but I haven't seen that. I am fully aware of Dr. L's teaching style and presence in the classroom, but there are some changes you could have made even with his participation. I am going to suggest that you ask me to come back to visit you when you have your own

course this summer (if you do) or in the fall so there will be more opportunity for you to use what you've learned in CUT.

Matt did not have his own course during the summer session but worked with the same professor in the same course. I visited him twice during the summer session, and I did see some minor improvements. Matt used a small group activity in the middle of his lecture on the legalization of drugs. He also called on groups so they could report on their findings. After the summer session, Matt completed the CUT Practicum.

While he never fully embraced the strategies, I realized that Matt was a teacher-centered instructor and that is where his comfort zone was. Shor, in *Empowering Education*, refers to “alien culture” (1992, p. 138) that resisters often feel is preventing them from being noticed or heard. Matt did not subscribe to the de-centered classroom environment that we supported—and that made him a *pedagogical* resister. The CUT program was an alien culture to what he experienced in his own classroom as a student and in watching his supervising professor teach. *Pedagogical* resisters maintain a teacher-centered classroom and believe that students who do not measure up are either lazy or dumb. Matt repeatedly wrote about his shock and dismay with his students' performance and unprofessionalism. Matt was also an *epistemological* resister because he rejected the educational psychology theories of how students learn and are motivated. I witnessed Matt's resistance to almost all of the CUT programming. Even though Matt was a low appropriator, however, he still attended the units, which meant there was some reason he continued to participate in CUT.

Danny (L3). Danny was a soft-spoken master's student in the social sciences. He worked with the same professor as Matt. A self-proclaimed “introvert,” Danny was

barely audible without a microphone in the classroom. Danny had some experience teaching high school social studies, and that is where he says he learned how to lecture.

Danny admitted that he struggled with the CUT program in several ways:

CUT was disjointed to a certain extent. Unit 3 was the most valuable. I didn't care too much for Unit 1. I didn't like that class. Very repetitive, over-structured. The workshops were hit or miss for me. The reflections in Unit 3 were silly. Spit out in 5 minutes. Stuff I was already thinking about anyway. It felt like 'What I Learned in School' today type of paper. I was frustrated at CUT education because you tell me things once, and I remember it. You don't have to repeat it. Wish that the stuff we did could have been condensed a lot more. I learned more teaching one class in Unit 3 than I did being in three workshops.

Danny claimed he found little value in most of the CUT program, although he did find his teaching experiences to be positive. Ironically, on the occasions that I observed Danny teach, he used few active learning elements and relied mostly on lecture, yet he noted, "I definitely noticed that I got more and more comfortable teaching. My discomfort doesn't come from a perceived lack of ability but from being an introvert." He considered himself adept at discussion, and commented, "This program didn't add to my discussion leading ability. As far as handling a discussion, I got a book, *How to Survive Your First Semester Teaching*. It is more pedagogically diverse than the CUT program.

His overall negative attitude was difficult to ignore and even more difficult to influence. Danny admitted "he often feels bored in any learning environment," so I was challenged to understand why he would remain in the CUT program when there was so little perceived value to him. Further, I was surprised to learn that he planned to continue

his education in a Ph.D. program considering that he claimed he felt bored in his master's program. Interestingly, Danny received "The Outstanding TA Award" from his department. Danny was a *pedagogical* resister because he did not believe in the teaching strategies we offered; he was a *rhetorical* resister because he did not think anything other than lecture was appropriate for the college classroom. Further, he was often frustrated and bored with both the CUT program and his graduate education in general. Danny's *pedagogical* and *rhetorical* resistance contributed to his overall dissatisfaction with the CUT program and resulted in him being a low appropriator of active learning strategies.

Eric (L2). Eric was a master's student in the social sciences and took the Practicum in 2009. I had previously worked with Eric during Unit 2 the previous semester. Eric was a serious graduate student—he sat alone at a table, and had to be coaxed to work with his peers during small group activities. His master's thesis topic was impressive and was accepted for publication. Based on our many conversations, I knew that he had struggled with a difficult past. Whereas Eric was easy to work with in both CUT Units 1 and 2, the Practicum was difficult for him. Eric was the discussion leader for an introductory history course and worked with a professor in his department who led the lecture. Eric formulated his teaching logs into four areas/questions: What were the day's goals and strategies? What worked well? What didn't? What would he do differently next time? His organization was helpful for reading, although Eric's journals were consistently short and while he discussed what he did in class, there was no reflection on his teaching. In his teaching log Eric described his day's goal:

Today the goal was to bring to light the larger themes contained in both the readings and the lectures through a discussion of the primary documents assigned.

The strategy employed was to start with the details within the various assigned readings and use them as building blocks to reach the larger issues together through dialogue.

However, the TA Coordinator noted “this sounds like lecture.” Further examination of his teaching logs showed that Eric could not identify any specific active learning activities he used in that class session. The TA Coordinator requested that Eric use some of those strategies when she came to observe him. Yet, she observed that Eric taught the discussion session “relying on the textbook going over the chapter section by section.” She suggested that Eric do a writing activity, engage the students in pair work, and ask the class to report on the concepts and themes presented in the lecture in their discussion session. In my field notes, I wrote that at this point Eric appeared offended at the TA Coordinator’s advice; in fact, his tone changed considerably for the rest of the Practicum.

I conducted Eric’s second observation mid-semester, and I focused more on the positive. In reference to his overall evidence of preparation I wrote: “You clearly know this material—your comments are informed and so are your responses. Furthermore, you are calm, respectful, and attentive. And you have a great use of examples that everyone can relate to.” However, I also suggested to Eric that in addition to simply discussing the material himself and relying on only two students to contribute, he could try to implement some of the strategies the TA Coordinator had suggested a month earlier in the Practicum. I reiterated those strategies both on his written observation and in our debriefing session.

Eric's teaching logs became increasingly rude in tone. Following his own question of "What were the day's goals and strategies?" Eric wrote: "The same as always Pinky, to try to get the students to connect the primary documents to the lectures and textbook and see not only the direct points being discussed but the larger issues at play in the subject." The TA Coordinator then responded:

But what teaching strategies did you use? If you aren't trying out what you've learned in CUT, what's the point of these observations or your participation?

Having read your log, I get the very strong feeling that you aren't taking this very seriously, nor are you using these observations and logs as opportunities to become a highly effective instructor.

Of the last question, "What will you do differently next time?" Eric wrote: "Everything went so well I'm not really sure." In response to the TA Coordinator, Eric attributed his lack of using active learning strategies to not having freedom in the classroom as a Teaching Assistant:

I am sorry if it seems that way but I truly want both myself and the students to succeed. I am having trouble knowing exactly how much experimentation I am at liberty to do in these discussion sections. The role that was assigned to me was very specific. I am not sure how easy it will be for me to introduce new strategies this late in the semester, nor how I can set student expectations or balance what I do with the other TA's two groups. Dr. C wants us to be as similar as possible so one half of the students do not feel it could have been easier in another TA's section.

I understood Eric's concerns, although I could not understand why he did not raise them at the beginning of the Practicum when either the TA Coordinator or I could have addressed the expectations and role of the Teaching Assistant more in-depth with him, as well as provided reassurance. It was also possible that Eric felt caught between two power structures—his department and CUT—and did not want to jeopardize his academic career. Based on my observation of his teaching, I believe that Eric genuinely wanted his students to be successful and he wanted to be an effective teacher. However, I realized that because Eric was a traditionalist, he did not feel comfortable as a student-centered teacher. I observed Eric experience some teaching success, although his instruction was not aligned with CUT principles. Eric's resistance to the TA Coordinator's pedagogical suggestions throughout the Practicum, however, went beyond rejecting teaching strategies; he showed a lack of respect toward her in his teaching logs. Upon closer examination of their written exchanges, I saw that the TA Coordinator's patience with Eric began to fade as the semester wore on. While my interactions with him were somewhat more pleasant, I wrote in my field notes that he identified with a teacher-centered philosophy and did not appear to be interested in expanding that view, which made him a *pedagogical*, *rhetorical*, and *epistemological* resister.

I realized that there were several reasons why Eric was a low appropriator. First, I recalled that Eric preferred working alone to collaboration, which translated into the classroom—he would rather lecture to his students than work together with his students, which was his learning style. He was resistant to peer response and found it to be intrusive and unnecessary. Another contributing factor was his field—history is taught in a traditional lecture format, and it is doubtful that Eric had any appropriate modeling

from any of his professors. Most likely the CUT curriculum was new to Eric, and it was easier for him to resist the teachings than be uncomfortable trying to enact them in the classroom. Further, at the time he took the Practicum, Eric was focused on completing his master's thesis and applying for doctoral programs. I believe that Eric wanted to please his professor and did not want to risk using teaching methods that he perceived to be out of his field's norm. Eric's overall resistance during the Practicum made me ask what his motivation was for remaining in the CUT program.

Low Appropriators with Oppositional Behavior: Lesley and Elliott

A fourth type of resistance—*oppositional*—was demonstrated by two Teaching Assistants in the low appropriator group. Giroux, in his text *Theory and Resistance in Education* (1983), argues that the category of opposition can be political: “Some acts of resistance reveal quite visibly their radical potential, while others are rather ambiguous; still others may reveal nothing more than an affinity to the logic of domination and destruction” (p. 109). Although the Teaching Assistants who demonstrated *oppositional* resistance by rejecting the structure of the CUT program and enacting appropriate teacher behavior in the classroom, their reasons for resistance were ambiguous and not necessarily political. I struggled to make sense of their choices and actions. Shor (1992) notes that *oppositional* students' behavior is a “reflexive resistance to authority” (p. 138). In addition, Shor claims that students internalize this resistance and “take their sabotaging skills wherever they go” (p. 139). The *oppositional* Teaching Assistants in this section demonstrated poor attitudes and rejected both positive feedback and constructive criticism.

Lesley (L3). Lesley was a doctoral student in education and took the Practicum in 2007. Lesley was the instructor of record for an introductory methods course for undergraduate pre-service teachers. During the time Lesley was enrolled in the Practicum, she was also taking Unit 2. She had previously taken Unit 1 and planned on taking the semester-long course that covered the same curriculum.

Lesley, who considered herself a “self-motivated learner,” found the CUT program appealing because: “First off, I am a very social person. And so I have made social contacts in other departments. And not social like in date, but social like attend a class, go out to lunch and talk about teaching.” Lesley was distracted in CUT workshops and spent her time during group activities socializing with her peers or misdirecting them away from relevant discussion, which according to Shor (1992) is a characteristic of resisting authority. On many occasions the TA Coordinator asked Lesley to focus on the task at hand, and I wrote in my field notes that Lesley did not appear to take the workshop content seriously based on what I considered unprofessional behavior of a graduate student—arriving late to workshops, continued inappropriate use of her laptop, disrupting the TA Coordinator’s instruction and a general lack of respect for her. Shor calls this behavior “getting by,” which is another *oppositional* strategy of being defensive and negative, and is a way for students to manipulate teachers (1992, p. 138).

Unfortunately, Lesley’s lack of professionalism carried over into the classroom. The TA Coordinator and I visited her classroom separately on two occasions and once together. Lesley’s class was taught in a computer classroom, which meant all students had a computer in front of them, and the rows were fixed. All three times we visited Lesley’s classroom we saw the same environment—there was little evidence of Lesley’s

preparation for that day's instruction; she had limited control of the classroom (many students were browsing online, visiting social network sites, and doing homework for other classes); and there was no clarity of instructional objectives for any of the class sessions. Furthermore, approximately the first 15 minutes of class consisted of small talk with no instruction.

The TA Coordinator reported that during their debriefing session following the teaching observation Lesley appeared committed to make a positive change in the classroom, but we found no improvements in our subsequent visits. Further unprofessional behaviors occurred during the semester, and as a result, Lesley did not receive a certificate of completion for the Practicum, and left the CUT program before completing Unit 4.

Lesley's actions in the classroom starkly contradicted her awareness during our interview:

There's so many tricks to teaching how to take attendance, how to grade papers, so many housekeeping, book work, whatever you want to call it, maintaining the paperwork of a course—I consider that a very small part of teaching because if you can't do that, your instruction time is lost, it's not as effective as it could be. So, those are important things, but they aren't everything. I look at what my students say on the evaluations and I look at what they tell me in email, and verbally, and I write them down and then I try to modify the course the next semester based on the comments the students had the last semester. So I feel like I am constantly evolving.

Although Lesley had prior teaching experience in high school and at a parochial college, neither the TA Coordinator nor I saw any evidence of instructional improvement or professionalism during the Practicum, yet she received continual feedback and suggestions during the semester on ways in which she could improve assignments, communication, and classroom management.

I wondered how Lesley could present so many contradictions. She considered herself a “lazy learner” though at the beginning of the interview she claimed she was “self-directed.” I suspected Lesley was a low appropriator in CUT because the value for continuing her education was the social aspect of belonging to a community rather than a desire to be skilled at applying theory and pedagogy to the classroom. Lesley used the CUT workshops, the annual Graduate Student Development Conference, and the undergraduate courses she taught as opportunities to socialize. When asked to repeat the Practicum and improve her behavior, Lesley opted instead to leave the program. Lesley was an *oppositional* resister because she chose to just “get by,” and “play dumb,” both strategies that “resist the teacherly authority that is imposing an alien culture on them” (Shor, 1992, p. 139). According to Shor, “playing dumb involves asking the same questions again and again, asking for instructions to be repeated, and missing assignments and deadlines” (p. 138). Lesley alternated between the two oppositional behaviors of getting by and playing dumb, which resulted in her own sabotage of her involvement in the CUT program and of potentially improving her teaching.

Elliott (L2). Elliott was a master’s student in the social sciences and was the instructor of record for a course on introductory bioethics when he enrolled in the Practicum in 2008. Elliott was outgoing but often made inappropriate comments both in

casual conversation and in the classroom. Elliott's participation in CUT Unit 1 during the same semester was uneven. I wrote in my observation notes that when he did contribute to class discussion, it had no relevance to the topic we were discussing or when called on to share the ideas he had just worked on in various activities, Elliott had very little to say. In his first teaching log of the semester, Elliott set the tone for his work:

And here we go! First, as I have always suspected, and promised I would never fall prey to, it is in fact a necessary truth of the world that if you give a person an audience, they will attempt to entertain them, and inevitably make an ass of themselves. While I have not fallen into the consequent of that conditional yet, I certainly bellied up to the bar for the antecedent!

Elliott then discussed his course strategies, which included using current news stories, developments in medical science and clinical experiences of students, all of which presumably related to his applied medical ethics course.

However, Elliott's intentions and what the TA Coordinator and I observed in the classroom were again contradictory. The TA Coordinator conducted the first observation three weeks into the semester, when she wrote him that "the classroom climate was a little reserved and the mix of teacher talk and student talk was 75/25. I didn't see any active learning strategies. Worse, is that you used inappropriate examples today, including a student having herpes, when a more suitable example, with as much if not more relevance could have been used." The TA Coordinator discussed her concerns with Elliott in their debriefing, and explained that his comments could be problematic, so he needed to be "very careful." I observed Elliott one month later for his second visit, and while I noted that Elliott seemed confident with the materials and appeared comfortable

in front of the class, in a medical ethics example, he mentioned being examined by a physician in his “nether regions” and talked of his fiancé taking an HPV preventative drug. These comments, though made without thought, were completely inappropriate. Further, I wrote in my observation notes that Elliott was at least five minutes late to class and spent most of his time lecturing.

I spoke to the TA Coordinator about Elliott’s comments in class, and then I met with him to review his conduct. It is important to note that the CUT program is voluntary, and we have an agreement with the Teaching Assistants not to report their performance to their superiors, unless we witness highly egregious behavior. Otherwise, it is the responsibility of the Teaching Assistant’s supervising professor and department chair to monitor them. Our role is to be advocates for the Teaching Assistants, and to help them make pedagogical and classroom management choices that will contribute to an effective classroom. Elliott’s comments, while inappropriate and unprofessional, were just part of his resistance—he stopped writing teaching logs prior to my visit, and after our discussion, he stopped coming to the workshops. I ran into Elliott on campus several weeks later, and he told me that due to school and work commitments he decided to leave the CUT program mid-semester.

I considered Elliott another example of *oppositional* resistance. I suspected Elliott was a low appropriator because based on his behavior both in and out of the classroom, Elliott sought a lot of attention, and he did not get an abundance of positive commentary from the TA Coordinator or me following his teaching observations. Elliott may have felt marginalized in some way that he did not belong to the CUT community. Elliott and Lesley sat next to each other at CUT workshops and were almost always off task

together, which I wrote in my field notes. Perhaps they both felt like outsiders; according to Shor, Elliott and Lesley established a “peer group identity based on their prestige as rebels,” though their peers were not impressed with their behavior (1992, p. 139). Based on the content of his teaching logs, Elliott was not seeking teaching advice. Ultimately, Elliott did not find the value of the program worthwhile and quit.

Low Appropriators from Rule-Governed Cultures: Rena (L2) and Beth (L2)

Rena was a doctoral student in the College of Education and took the Practicum in 2009, though her master’s degree was in Composition from the same university. Beth was a master’s student in the English Department and also took the Practicum in 2009. The Writing Program within the English Department was the only program at the university that held its own Teaching Assistant training, which consisted of a week-long seminar focusing on active learning and grading strategies for its Freshman Composition instructors. These Teaching Assistants were instructors of record and responsible for two sections of Freshman Composition that averaged approximately 24 students in each section. The Writing Program Administrator coordinated and led the required seminar, which was not related to the CUT program. Both Rena and Beth participated in the week-long seminar. Teaching Assistants from the English Department took the CUT program voluntarily and as additional training.

Rena and Beth shared some characteristics: in addition to teaching the same course, each woman came from a rule-governed culture. Rena was raised in a highly religious community, and Beth was Asian-American. It was apparent that their cultures, both of which were patriarchal and did not focus on the development of a female as an intellectual, affected their roles in the classroom. Joel Spring, author of *The Intersection*

of Cultures (2006), notes that “in Confucian tradition, the teacher is an extension of the parent. Teachers are given a great deal of respect and status. Students are expected to obey and respect their teachers in the same ways they respect their parents” (p. 155). And while modern religious women have more educational opportunities than their mothers and grandmothers did, in Rena’s culture, women are still assigned traditional gender roles of wife and mother first.

In spite of the intensive pedagogical training they received in their home department and the additional CUT training, Rena and Beth were clearly teacher-centered in their approach. Both women lectured from the front of the classroom and remained there for the 50-minute duration, and neither woman drew on any of the numerous teaching strategies they learned. Rena was more open than Beth in discussing ways to improve her teaching, although she resisted making any changes in the classroom. I observed each of them once during the Practicum, and I wrote in my field notes similar comments—I thought they were rather inaccessible as instructors and distant from their students, and I hoped they could each improve their classroom environments. The TA Coordinator corroborated my observations during her own visits to Rena and Beth’s classrooms.

It was not until the end of that semester when I compared Rena and Beth’s backgrounds and teaching styles that I realized that there were similar patterns. They were both *rhetorical* resisters because they questioned the appropriateness of using CUT strategies in the classroom context. I considered that there was a connection as to why they were low appropriators. Because each woman still strongly identified with her own culture and because the values of those cultures were highly traditional and rule-

governed, there appeared to be a transfer into the classroom. It was possible that Rena and Beth found value in the CUT strategies, but they were not comfortable enacting them in the classroom at that time.

The Learning Continuum Taxonomy

The Learning Continuum Taxonomy (Figure 5.1) was developed to illustrate the learning paths of the participants in this study, and is grounded in data from the participants. The first group represented on the continuum—the low appropriators—are characterized by four types of resistance: *rhetorical*, *pedagogical*, *epistemological*, and *oppositional*. Several of the low appropriators in this study displayed more than one type of resistance, meaning that the reasons for their behavior were complex.

The middle of the continuum depicts those participants who demonstrated some level of improvement during the semester they were enrolled in the CUT Unit 3: The Practicum. Participants are categorized according to descriptors that best represent their learning circumstances and/or behavior. At the low end of the continuum line are the participants who overcame difficult circumstances. They are characterized as having few teaching opportunities, dealing with small class attendance, and having little support from faculty. The next group on the continuum is those participants who have difficulty putting theory into practice. They are characterized by having a lack of confidence, being overwhelmed with the responsibility of teaching, and not applying the pedagogical strategies of the CUT program. The mid-point of growth on the learning continuum is represented by those participants who are eager to please their supervising professors and both the CUT Coordinator and me. They share the characteristics of being agreeable, and being consistently prepared; however, they need positive reinforcement to enact new

strategies and to recognize their own growth. The next group on the continuum is those participants who have content knowledge expertise; their teaching is characterized by informed discussion, having high expectations of their students and of themselves, and having students who are engaged in the learning process. The last group of participants on the continuum line has strong voices. They are comfortable in front of their students, they use active learning strategies, and they have a substantial work ethic. All of the participants on the continuum line improved their teaching at different levels and in various ways.

Finally, the other end of the learning continuum is anchored by the high appropriator group. They have the ability to deeply reflect on their teaching, they have a keen awareness of their students' needs, they use a range of instructional approaches in the classroom, and they develop comprehensive lesson plans. Similar to "A" students, the high appropriators work well independently and need little support. They also enjoy opportunities to engage in the discourse of the teaching community and seek occasional advice on classroom practice. Though the high appropriators seemingly needed the CUT program the least of all the participants, they claimed to find much value in all of the units.

The Learning Continuum Taxonomy

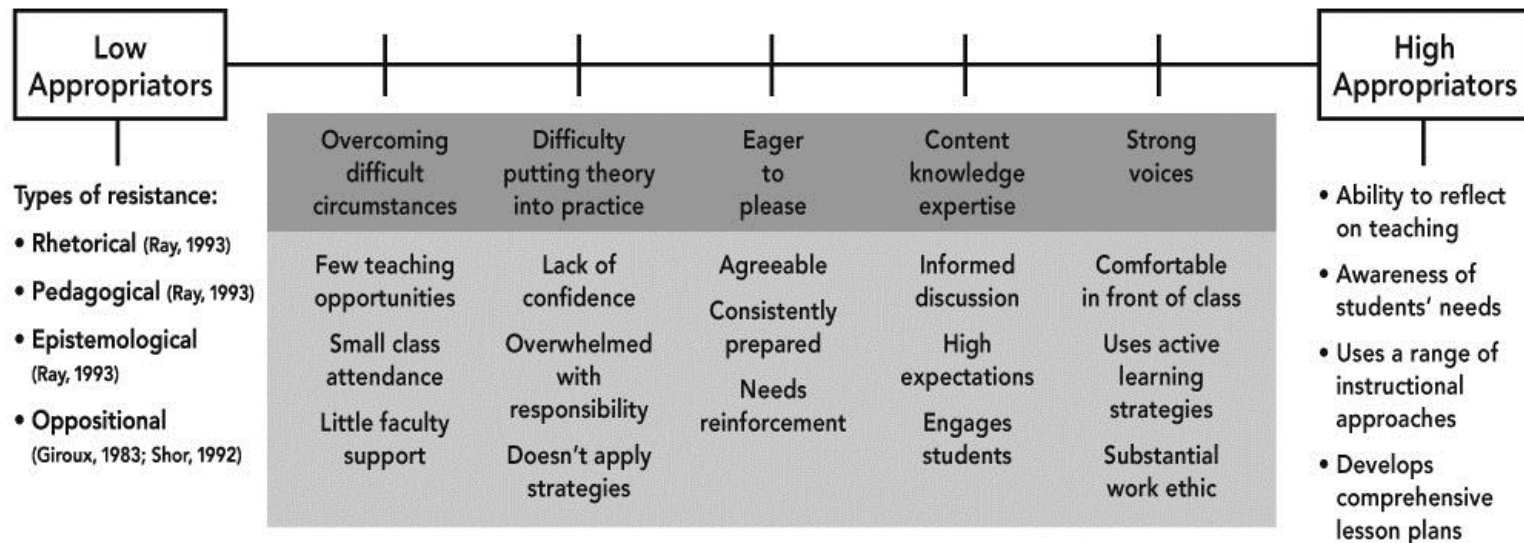


Figure 5.1. The Learning Continuum Taxonomy

The Learning Continuum Taxonomy is not intended to represent a linear path; groups do not necessarily move from one point on the continuum to the next as in stage theory. Rather, this learning continuum is representative of a community of practice. Lave and Wenger (1991) argue that communities of practice are formed as people pursue shared interests over time and engage in social practice. The three characteristics of communities of practice as defined by Lave and Wenger are: the *domain*, or shared interest; the *community*, or relationship building; and the *practice*, or the ways of doing things in a group (1991, p. 98). The focus is on the ways in which learning is an “evolving, continuously renewed set of relations” (Lave & Wenger, 1991, p. 50).

Participants in the CUT program joined an established community of practice. While some of them became core members (high appropriators), others remained more at the margins (low appropriators). The CUT program, as a community of practice, is an example of situated learning, or how learning takes place in social relationships and constructing identities around that environment (Wenger, 1999). Within the larger community of practice, individuals who comprise each of the smaller groups on the continuum increased their learning and improved their teaching within the Practicum, though at varying levels. Some participants improved in small ways; others in more significant ways. The Learning Continuum Taxonomy illustrates that while participants’ learning paths are unique in a community of practice, there are common characteristics of how participants in the CUT program appropriated the pedagogical strategies, their relationships with their supervising professors and the CUT Coordinator and Assistant Coordinator, and their students. All of these social and complex relationships contributed to how the learning continuum was formed.

Summary

Chapter Five examined two segments of the CUT community—participants who willingly integrated CUT principles in the classroom and those who had difficulty doing so. The high implementers in this chapter all verbalized that they gained a lot in the program, yet they needed the program the least of all participants. While their individual ability was high going into the Practicum, it does not necessarily correlate that their self-efficacy was also high, although the qualitative data sources suggest that this was the case.

The low appropriator group shared a narrow worldview of teaching and none of them were open to constructive criticism or feedback, although that was the primary purpose of the Practicum. They demonstrated one or more of the following types of resistance: *rhetorical*, *pedagogical*, *epistemological*, or *oppositional*. The *oppositional* participants were the most difficult to work with because they did not take the CUT program seriously and left the program altogether in the middle of the semester. CUT rarely has an attrition issue since it is voluntary, and I took their decisions personally. Could I have done something differently to reach them?

As I wrote this chapter, I looked more closely at my own behavior toward the low appropriator group. My professional and personal beliefs became increasingly blurred as I often felt uneasy and frustrated with them during the Practicum. I wanted the Teaching Assistants to succeed and I attempted to give them specific strategies and encouragement in writing and in our debriefing sessions. But as teaching logs were indifferent, condemning, and off subject, and as my second and third observations showed little to no enactment of strategies, I felt somewhat deflated as a practitioner and, in addition, I came

to their classrooms with lowered expectations. The action research cycle of observation, reflection, action, and evaluation was affected as I struggled to connect with the low appropriators. While I remained professional even when some participants in this group were difficult to work with, I cannot help but think about how my frustrations prevented me from approaching them differently. I admittedly had less patience for the low appropriator group, and at times I entered their classrooms focusing more on what was wrong rather than what was working. Perhaps had I kept my expectations more neutral toward the end of the semester with the low appropriators, I would have identified some positive behaviors.

Chapter Six discusses my overall findings from this study, including addressing the final research question: “In what ways might the CUT experiences and curriculum be improved?” It also examines future implications and suggests areas for future study of TA training.

Chapter Six

Improving the CUT Curriculum

This study has examined one voluntary campus-wide TA training program at a Midwest state university for nine semesters. The participants in this program comprised developmental levels on a learning continuum: high appropriators, those with varying levels of improvement in the middle range, and low appropriators or resisters. Chapter Six examines Research Question #3: “How might the CUT experiences and curriculum be improved?” This chapter also discusses future directions for TA training programs based on lessons learned.

Multiple Roles

Throughout the course of this study I assumed multiple roles: researcher, teacher, supervisor, and mentor. At times these roles conflicted with each other, particularly when I supervised the Practicum students and conducted research at the same time. As a supervisor, I was disappointed when my participants did not perform as well as I had hoped in the classroom. With the low appropriator group, I became frustrated—and upset—at their unwillingness to take the TA Coordinator’s and my pedagogical advice. As a researcher, having these subjective feelings adds layers to the analysis, but I think I was so concerned with being an effective supervisor that I minimized my own role as researcher.

It was very difficult for me not to make assumptions about my participants over the course of this study. Even as I carefully reviewed and coded my data for this study, I wondered if and how my beliefs affected each participant and their views and actions in the CUT program. The participants, who had highly positive experiences, tended to view

me as a mentor, but the participants who had considerable difficulty with the program and those who left the program did not connect with me either as a teacher, supervisor, mentor, or all three. I cannot help but consider my role in the low appropriators' outcomes.

There were, however, some surprises as I analyzed my data for this study. Several of the participants in Chapter Four, on the learning continuum, actually performed more strongly and demonstrated more learning in their teaching logs than I had remembered. Conversely, one student from Chapter Four, whom I originally thought was strong in the classroom, upon closer examination of the data did not actually integrate CUT strategies as well as I had envisioned at the time.

The tensions I faced assuming multiple roles during this study were somewhat helped by keeping my own journal so that I could process interactions and relationships. However, it was not until I had some distance from the participants and the program itself that I was able to make even deeper meaning of my experiences and my participants' experiences. As I reflected on my own action research cycle, I saw that the process was interrupted at times when my leader role appeared more urgent than my researcher role. For example, as the coordinator of the Practicum I made some administrative decisions that were not necessarily informed by the action research process. The cycle was restored when I was unconstrained by the immediacy of my leader role and I was able to fully observe and reflect to inform my own action.

My own experiences as a Teaching Assistant in the Writing Program during my master's program over 20 years ago helped me to contextualize the CUT participants' experiences in their own classrooms, since I probably would have been categorized as a

resister when I began as a TA. Unlike my peers who were awarded their own Freshman Composition classrooms, I was assigned to work with a lecturer in her freshman-sophomore survey literature course. I was disappointed and resentful with this assignment because I only taught six times that semester, and while my peers were busy creating assignments and grading, I had relatively little responsibility. I was somewhat embarrassed by my position, and although I was scared to teach—I had no prior experience—I felt inferior to the other Teaching Assistants. Nonetheless, when I taught the writing workshops for the literature course, I used the active learning strategies I had learned about in the English Department TA week-long seminar. I realized after the workshops that not only could I organize and teach an effective class session, but I wanted to do more of it.

Like some of the CUT resisters, I too experienced a strained relationship initially with the Writing Program Administrator (who later became my mentor). A series of initial miscommunications created some bad will between us, and it was not until the end of that first semester that we resolved those issues. I was also a student in a graduate seminar on Teaching College Writing with this person, and at the beginning of the semester, I brought my anger and dissatisfaction with my appointment to class which I am sure was apparent in both my written reflections and in class discussion. The turning point was my teaching performance—as I began to have success in the classroom as a TA, the WPA (who was also my supervisor) gave me positive feedback and affirmed that I could be an effective instructor. That feedback helped me to overcome some of my general resistance and as a result, I began to have more confidence and let go of the negative feelings. Furthermore, I reminded myself that I had the background knowledge

from my graduate courses on composition theory and motivation theory to draw on when I structured my class activities, as well as the week-long Composition TA workshop. All of these factors helped me to develop a sense of self-efficacy. Once I began to believe that I could carry out the complex tasks of teaching, I experienced control in the classroom. My experiences as a Teaching Assistant informed my research process for this study and allowed me to empathize with the range of participants, both adapters and resisters.

Improving CUT

Based on the results of this study, CUT participants overall experienced satisfaction with curriculum, feedback, and Practicum support. An important issue to consider for improvement is re-examining how participants are being supported in all phases of the CUT program, particularly the Practicum. Chapter Four discussed the learning continuum of CUT participants—for some, learning was clearly evident; for others, growth was a more gradual slope. Yet overall we reached the participants—they improved their teaching to some degree, and they certainly had more awareness of what good teaching is and a better understanding of what their own teaching looked like in the classroom.

In Chapter Five, the two opposite ends of the learning continuum were examined. The high appropriators of CUT strategies gave outstanding performances as Teaching Assistants from the very beginning of the semester. Not so coincidentally, the high appropriator group reported that they received a lot of value out of the program. Even though the high appropriator group had experience using CUT strategies in previous teaching experiences, they frequently reflected in their teaching logs that their confidence

was increasing and they were becoming more skilled at teaching in general. Of all of the Teaching Assistants in this study, the high appropriator group needed the CUT program the least because they demonstrated the most capability. Not surprisingly, they were the most verbal of all of the groups in expressing their satisfaction with the program.

The low appropriator group, however, appeared to receive the least amount of value from the program, and yet from my perspective, this group needed it the most. Focusing on the low appropriator group is one of the most important ways to improve the CUT curriculum. More specifically, how do we reach the CUT participants who resisted the program's curriculum? With the exception of two participants, the rest of this group—five participants—remained in the program and therefore actually found some perceived value, even though it may not have been immediately evident to us. Perhaps it was the credential to put on their vitae along with a letter of recommendation from the TA Coordinator and the Graduate Dean that motivated this group. Having these credentials is certainly advantageous to a job search or for acceptance into a doctoral program. Or it is possible these participants could have found some value in the curriculum, but did not verbalize it in debriefings or reflections or show it by example. It is important to note that many of the low appropriators did not learn how to reflect by the end of the Practicum either because they lacked the metacognitive skill, they needed more modeling on how to reflect, or they did not value reflection as part of the teaching process. Because this group displayed various levels and types of resistance, it is most difficult to understand their motivation for completing the CUT program.

As shown in Table 6.1, there are three stages of TA development: senior learner, colleague-in-training, and junior colleague (Sprague & Nyquist, 1991). Thirty percent of

the CUT participants were in the colleague-in-training stage, where they used the teaching discourse in workshops and in teaching logs and for the most part, were independent in their thinking and actions. Seventeen percent of the CUT participants were in the junior colleague stage; they played the professional roles of faculty; they were concerned with curriculum and assessment; and they recognized the value in collaborative learning, both in the classroom and with their colleagues. Finally, forty three percent of CUT participants remained in the senior learner stage, where they were still dependent upon their supervising professor, and were concerned about being liked or accepted by their students (the two participants who left the program were not considered to fit any of these stages). But no matter what stage CUT participants were in as they completed the program, they made some individual progress in their Teaching Assistant training by engaging in the recursive action research process of observation, reflection, action, and evaluation.

Table 6.1
Indicators of Teacher Assistant Development

	Senior Learner	Colleague in Training	Junior Colleague
<i>Concerns</i>	Self-survival	Skills	Outcomes
	How will students like me?	How do I lecture, discuss?	Are students getting it?
<i>Discourse Level</i>	Pre-socialized	Socialized	Post-socialized
	Give simplistic explanations	Talk like insiders, use technical language	Make complex ideas clear without the use of jargon
	Give simplistic explanations	Talk like insiders, use technical language	Make complex ideas clear without the use of jargon
<i>Approach to Authority</i>	Dependent	Independent or Counter-dependent	Interdependent/ Collegial
	Rely on supervisor	Stand on own ideas defiant at times	Begin to relate to faculty as partners in meeting instructional challenges
<i>Approach to Students</i>	Engaged/ vulnerable; student as friend, victim, or enemy	Detached; students as experimental subject	Engaged/ professional; student as client
	“Love” students, want to be friends, expect admiration, or are hurt, angry in response, and personalize interactions	Disengage or distance themselves from students—becoming analytical about learning relationships	Understand student/instructor relationships and the collaborative effort required for student learning to occur

Adapted from: Sprague, J., & Nyquist, J.D. (1991). A developmental perspective on the TA role. In J.D. Nyquist, R. D. Abbott, D. H. Wulff, & J. Sprague (Eds.), *Preparing the professoriate of tomorrow to teach: Selected readings in TA training* (p. 306). Dubuque, IA: Kendall/Hunt

One important way to improve the CUT curriculum is to reconsider how to reach the low appropriators. As stated in Chapter Five, as these participants became more resistant, I became somewhat less patient, and I regret not re-examining ways I could have reached them during the Practicum when they were struggling and when they clearly let me know it did not feel safe to use these strategies. I would suggest the following ways to improve the CUT curriculum overall:

Offer more modeling opportunities of good teaching. All CUT participants are required to observe award-winning professors teach twice during Unit 1 of the CUT program. But, as is often the case, participants do not take Unit 3 (the Practicum) immediately following Unit 1, so significant time has passed before they are teaching. One way to address this issue is to divide the observations so that one is completed during Unit 1 and the other is completed during Unit 2. While all CUT participants would benefit from additional opportunities to observe dynamic faculty teach, encouraging the low appropriator group to observe would reinforce CUT strategies and provide concrete examples of good teaching. Many participants in the low appropriator group did not have professors in their own departments who practiced active learning in the classroom, so it is not surprising that they did not embrace CUT strategies. Ideally, we would identify a professor in each discipline in the region who models active learning strategies for Teaching Assistants to observe—there are many faculty members at our institution who demonstrate quality teaching. Further, because the title of “Award Winning Professor” is often a political rather than merit based award, we should reconsider which professors are selected for observation. Still, offering opportunities for CUT participants to observe

good teaching, especially in their own discipline, builds on the vicarious experience aspect of self-efficacy. Perhaps models can be identified of interest in the future.

Integrate more traditional learning strategies in a workshop. While the CUT program does not focus on traditional learning, such as how to give a meaningful lecture, using PowerPoint slides, creating useful handouts, and addressing larger lecture classes, there is a need to design such a workshop for the more traditional learner. There is value for all CUT participants to learn these strategies, and perhaps there would be more buy-in on the whole program from the low appropriators if we addressed an area that they felt more comfortable with.

Increase lines of communication more with the low appropriators. One of the strategies I use with my own undergraduate students who are struggling in my course is to have an individual conference(s) to learn more about why a particular student is having difficulty. I ask a bit about his/her personal life and commitments, work outside of school, and school load. Then I ask the student why he/she thinks he/she is having difficulty with the course, and I ask for specifics. This individual time allows me to find ways to help the student with the course, to problem solve when necessary, and to show the student that I care about his/her learning and progress in the course. In the Practicum, most of the communication is written response between the participant and either the TA Coordinator or myself. Additionally, we meet on three occasions during the semester to debrief on the teaching demonstration face-to-face we observed.

For improvement, it would be beneficial for Practicum participants to meet with us as a group more frequently to share teaching strategies, to problem solve, and to get positive reinforcement. In the low appropriator group, each participant was visibly

uncomfortable and defensive during their individual debriefing session. Perhaps if I had met with each of the low appropriators individually in addition to the debriefing sessions without the focus on critiquing their teaching, I could have learned more about their resistance and addressed it individually. With the Teaching Assistants' defenses lowered, I may have been able to address their concerns with the CUT curriculum. But most importantly, I could listen more effectively, which might give the low appropriators a sense of agency in the program. As an additional benefit, meeting more often with participants would allow us to review with them in advance the contents of their teaching portfolio that is required to receive the CUT certificate of completion. Participants would benefit from a reflective dialogue and another opportunity to ask questions before the teaching portfolio is submitted.

In recalling my own experience as a Teaching Assistant, had the WPA verbalized to me her initial concern around my resistance, we could have communicated earlier in the semester and resolved our misunderstandings. We both agree that early intervention on her part would have helped focus me and would have made me feel less like an outsider. The same reasoning applies to the struggling participants in the CUT program—more individual attention could have gone a long way toward helping them work through and/or overcome their *rhetorical, pedagogical, epistemological, and oppositional* resistance.

Integrate a teaching for social justice focus into more aspects of the CUT program. I developed the workshop on *Ensuring Social Justice* based on a doctoral independent study in that area as well as a shared interest with my dissertation co-chair in examining how we facilitate the knowledge and skills needed to productively and

conscientiously engage in conversations about gender, race, ethnicity, sexual orientation, and religious beliefs. While teaching for social justice is challenging work, it is also part of what makes us fair and effective practitioners. As part of CUT Unit 2, I taught the two-hour workshop on *Ensuring Social Justice* utilizing some of the materials from the Knapsack Institute in Colorado Springs, CO, a four-day intensive workshop on incorporating social justice issues into higher education across the curriculum, as well as materials from my own research.

I found that while most CUT participants appeared engaged in the classroom dialogue during the workshop, not a single participant talked about the subject again—either in other workshops or during the Practicum experience. I realized that particularly for inexperienced instructors, issues of teaching for social justice may be too overwhelming. Yet a two-hour workshop on this complex issue is simply too cursory. I would like to have conversations with the CUT participants during more frequent Practicum group meetings to explore the ways social justice issues arise in the classroom. I would also require CUT participants to include at least two articles on teaching for social justice in their teaching resources section of their teaching portfolios. Further, this more in-depth component aligns with Border's (2006) Best Practice in Teaching Inventory discussion on incorporating social justice themes into personnel, curricula, and programs. Giving more importance to teaching for social justice in the CUT curriculum will hopefully show Teaching Assistants that all students deserve to have an education on a level playing field, and that understanding our own beliefs and biases is critical to our evolution as faculty.

Re-examine the effectiveness of CUT coursework vs. workshops. Four out of the seven low appropriators discussed in Chapter Five were enrolled in one of the for-credit courses also offered as part of CUT credit. This suggests that perhaps the for-credit courses were not as effective in supporting participants as the CUT workshops. One of the challenges with the for-credit coursework is that the emphasis is on theory rather than application, whereas in the workshops, the focus is on both areas. The intent of adding the for-credit course option to the CUT program was to give students deeper understanding of higher education theory and pedagogy. Yet from my observations of and dialogue with the low appropriator participants, the for-credit course was not supporting them. Ebest (2005) argues that both faculty and Teaching Assistants must employ a variety of teaching strategies and be aware of different learning styles, which are not used in most graduate curricula. Kolodny notes “if faculty and graduate students were to examine their own learning styles, they would find that they generally favor pedagogical approaches that represent the ways they learn best. Becoming aware of their strengths and experimenting with alternative teaching strategies will help them meet the needs of a variety of learners” (1998, p. 166). More dialogue among faculty who teach the CUT courses could help to address this issue; further examination of how the for-credit coursework actually supports CUT participants is warranted.

Broaden the mentoring component of the CUT program. Perhaps the most influential informal education a TA can receive is through a mentoring relationship with a professor in his/her area of interest. The CUT program offers a mentoring component in which a participant is paired with a professor at another four-year university or private or community college for a day and shadows the professor in class and professional duties.

While this is certainly a positive experience for the CUT participant, the short interaction does not allow for a more developed relationship to form. Ideally, we could look toward building an e-mentoring program for our CUT participants. Establishing this e-mentoring component would be beneficial for all of our participants, and especially the low appropriators, who would have the opportunity to build a strong relationship with a professor in their field and provide an additional positive resource.

Jean Lave's (1996) apprenticeship model, which demonstrates that skills are learned by observing and watching an expert in a specific field, can be applied to a student-professor mentoring experience. Though the apprenticeship model was used long before formal schooling, even today many complex and important skills are learned through non-didactic teaching, such as observation, coaching, and successive approximation (Collins, Brown, & Newman, 1990). Lave (1996) asks how apprenticeship studies could be relevant to learning in social settings (p. 150). Lave and Wenger (1991) argue "wherever people engage for substantial periods of time, day by day, in doing things in which their ongoing activities are interdependent, learning is part of their changing participation in changing practices" (p. 150). In other words, learning occurs in any community of practice, whether institutional or other social organizations.

Some TA programs have a full mentoring component complete with institutional buy-in, while other programs offer a brief mentoring experience (i.e. one day) that at least addresses the need for a mentor-mentee relationship as part of the graduate school experience, an option the CUT program currently offers. However, a one-day shadowing experience is not a true mentoring experience, particularly because mentorship is a complex, multidimensional activity (Hickson & Fishburne, 2006). Reasons why

mentoring components of TA training programs are difficult to institute include lack of time and/or interest from faculty willing to serve as mentors, and lack of understanding between mentor-mentee about how these relationships are supposed to function.

Park (2004) suggests that mentors need to assist TAs in developing appropriate content area knowledge, advise students how to find and use resources, study skills, academic advisory, and how to develop effective communication skills. Roach (1997) adds that mentoring programs should help TAs learn how to deal with conflict situations. In sum, mentoring programs need to be both systematic and planned. The Preparing Future Faculty website offers a comprehensive section—including multiple resources—on “Organizing and Supporting Effective Mentoring.” PFF also supports a formalized system of mentoring in teaching and professional service, which includes presenting papers with faculty members and attending professional meetings.

My graduate school experience was greatly enriched by the relationship I shared with my mentor (the former WPA and later TA Coordinator). She provided a sounding board for my own student issues; she helped me evolve as a practitioner by modeling strong teaching in her own classroom; and she was instrumental in helping me secure my first teaching position at a prestigious private university. After I graduated, we continued to work together on projects and share teaching strategies. I looked to her for career advice, and when I decided to return to school to pursue my doctoral degree, we worked together on the CUT program, and she agreed to serve as one of my dissertation co-chairs. This 20-year mentoring relationship has served me in numerous positive ways, which has been invaluable to my intellectual and emotional growth as an educator and life-long learner.

To address some of the time concerns of faculty members and still allow for the benefit of a mentoring relationship to develop, an e-mentoring program could be successfully integrated into a new or existing TA program. This online component can help cultivate a richer learning environment for the Teaching Assistants and provide a positive professional development experience for the mentors. Further, the experience of being a mentor is likely to foster professional activity and growth in the faculty member (Gaia, Corts, Tatum, & Allen, 2001).

An e-mentoring program would begin at the end of the summer session, when TAs could be matched with volunteer mentors. Using the home institution has advantages such as incentives for mentors, a shared understanding of specific university cultures, and close proximity for meetings. However, close proximity is not mandatory, especially if a potentially successful match could be made at another local campus. An advantage to expanding the program in this way is establishing invaluable partnerships with other institutions.

Many universities have a shared online communication system, and this can serve as the main communication structure for an e-mentoring program. It is important to use a shared system as a structured environment in which to communicate rather than to use university email for several reasons: 1) it serves as a record of all conversation and shared materials between the mentor/mentee; 2) it is a reminder that other mentor/mentee relationships are being established on campus and gives credibility to the program; 3) it is more effective for the facilitators to post announcements, questions, and other relevant content to a shared space.

The purpose of an e-mentoring program is to provide an opportunity for mentoring that is limited by face-to-face mentoring programs. It also enables the mentee and protégé to become active and valued members who contribute to the academic community (Katz & Coleman, 2001). Finally, e-mentoring provides the mentee with opportunities for feedback questioning, sharing, discussion, challenge, and guidance through the learning cycle (Kelly, Beck, & Thomas, 1992). Specifically, mentors can help their mentees with the following areas:

- Career aspirations and goal-setting
- Time management and procrastination problems
- Identifying people at one's institution who can be helpful and how to approach them
- Thinking through or role-playing difficult situations that the student needs to negotiate
- Advice about participation in professional organizations and conferences
- Acquiring or improving skills on how to give a talk or manage classroom dynamics. (The ADVANCE Program at Brown, 2009, p. 6)

For this mentorship to work, mentees should be open to feedback and willing to listen to advice, even if they do not take all of their mentors' suggestions (Park, 2004).

In addition to planning and organization, a mentoring program must include assessment (Luna & Cullen, 1998; Villar & Alegre, 2006). E-mentoring participants would keep a reflective journal throughout the semester-long program that would be read and commented on several times during the semester and again at the conclusion of the unit. Such a journal can assess the participant's role and involvement in the

mentor/mentee experience. The mentor should also be asked to submit a written paragraph at midterm and at the end of the semester discussing his/her involvement and experience as a mentor. Though the TA trainer would have access to group pages as a facilitator, it is not necessary to read confidential exchanges between the mentor and mentee during the semester. Reading and responding to their periodic evaluations as part of the assessment process and being available for consultation, particularly if an issue arises, should be sufficient in providing ongoing support to both the mentor and mentee.

According to the literature, a successful e-mentoring program should have an overt structure that will include an established time period, a statement of purpose, and regular, scheduled communication (Akin & Hilbun, 2007). Green and Bauer (1995) claim that students who have strong mentoring relationships are more productive, have a higher level of involvement within their departments, and are more satisfied with their programs. Faculty mentors may advance their professional development, increase their professional stature, enrich their networks, and may gain an eventual confidant, supporter, and colleague. Other benefits include providing release time for research activities, increased funding opportunities for graduate students, and an apprenticeship experience for future professors. The stakeholders—the department, academic staff, graduate students, and undergraduate students—all have the potential to gain (Hickson & Fishburne, 2006). But perhaps the biggest benefit to both mentor and mentee is personal satisfaction. Regardless of whether mentorship is built into a course, a teaching practicum, or online, it is an invaluable part of preparing the Teaching Assistant for academic survival and success.

Improve the CUT program evaluation system. The CUT unit workshops relied on a paper/pencil quantitative/qualitative formative evaluation form administered during

the last several minutes of each two-hour workshop. The qualitative questions elicited brief answers. Last year, workshop evaluation forms were moved online with minimal student participation. This year they were administered in the classroom once again to increase CUT feedback.

I would recommend that instead of administering evaluation forms at the end of every workshop, a more comprehensive evaluation is given at the conclusion of every unit. It is more beneficial for participants to reflect on their entire experience, especially because it takes time for the learning theories to make sense. If at least 15 minutes were allotted at the last workshop to evaluate that unit, participants may be more likely to comment specifically on what they have learned that semester.

I would also recommend that a formal evaluation be given to participants who complete the Practicum. In the past, we have relied on the participants' teaching logs to gain information about what they have learned in Unit 3. However, as evidenced from the teaching logs I collected as data for this study, participants did not always reflect on what they learned in the Practicum. Administering a formal evaluation at the end of their Practicum experience that would be submitted in conjunction with the final teaching portfolios will ensure that participants give us more reliable program data.

Finally, I recommend that CUT participants complete a comprehensive exit evaluation as a requirement of receiving their CUT certificate. While we hear anecdotally from some CUT participants how valuable the program was to them, we do not have this data on paper. There is great value in being able to present to university administration what we know our CUT participants are gaining from this program and of benefit to us to learn what is not going well.

Reconsider the staffing structure of the CUT program. In order to institute a thriving mentoring component, an additional staff member would have to be hired. A part-time coordinator cannot effectively teach workshops, run the Practicum and visit Teaching Assistants' classrooms, and maintain a successful mentoring program. Appointing another faculty/staff member to assist with running the CUT program would be necessary, or potentially making the part-time coordinator position a full-time one in order to ensure that all CUT participants' needs are met.

Future Directions for TA Training and Preparing Future Faculty

Require attendance at TA training programs. Though many campus-wide initiatives offer TA training (primarily through teaching and learning centers), these pre-semester conferences and subsequent sessions are generally not required. At the University of Missouri-St. Louis, Political Science TAs are required to attend both the two-day Graduate Student Conference on Professional Development held in August just prior to the academic year, as well as to complete the CUT (Certificate in University Teaching) program. Individual departments, graduate schools, administration, and faculty need to be convinced that TA training can be both an appropriate and powerful tool to improve TA performance and self-efficacy (Prieto & Meyers, 2001). This dissertation's purpose was to provide empirical documentation of learning outcomes for a group of TAs who engaged in various components of the CUT program between 2007 and 2011. Although participants' responses reveal mixed appropriation of CUT ideas, evidence of development in reflecting and engaging in new strategies are abundant. Campuses that value effective teaching continue to refine programs to prepare future faculty.

Incorporate comprehensive departmental training. Individual departments need to offer their own comprehensive training in addition to and in conjunction with the centralized programs. “The reality is that the quality of the graduate Teaching Assistantship experience depends directly on how willing faculty in the disciplines are to commit themselves as mentors and guides” (Lambert & Tice, 1993, p. 131). Yet departmental and faculty support for TAs is highly variable (Mintz, 1998). One of the recommendations from my university’s Center for Teaching and Learning’s five-year review committee (2007) was to work more with individual departments to develop their own Teaching Assistant training components.

Still, departmental components of TA training are not meant to replace the larger effort of centralized programs. Centralized programs that usually contain elements of PFF give graduate students immensely important content that departments do not offer, including seminars on professional and career issues, teaching in a multicultural setting, reviewing academic governance systems, and advanced mentoring opportunities (Tice, Gaff, & Pruitt-Logan, 1998).

Expand PFF programs. Ebest (2005) argues that PFF needs to be institutionalized. She draws attention to the University of New Hampshire’s intensive and nationally known PFF program as an example:

Graduate students who have completed their first year of doctoral work and are recommended by their graduate advisors may take a 12-credit cognate in college teaching or earn a 32-credit master of science for teachers while pursuing coursework for the Ph.D. The cognate requires four core courses, four courses within the student’s field, and four praxes courses. The master’s degree has a

similar emphasis, requiring 16 hours of core courses, eight within the discipline, and eight praxes. Coursework is offered throughout the academic year, including the summer session. (p. 40)

Expanding PFF through cognates, minors and degrees is a significant step in legitimizing the field. Jerry Gaff (1975), national co-director of PFF, believes that PFF should be more than an option for graduate students. As long as PFF programs remain voluntary, their usefulness will be limited to those students and faculty who recognize the need for and value teaching skills (Ebest, 2005). We need to recognize that TA training is the first stage of faculty development (Lambert & Tice, 1993). It is a development continuum that should be sustained throughout a faculty member's professional life (Lewis, 1997).

Continue re-conceptualization of teaching. The last 30 years have shown considerable progress in developing programs for TAs: e.g. TA workshops and programs, teaching and learning centers, conferences on TA training (POD and Lilly), and the PFF movement; these initiatives—demonstrate a commitment to effective teaching. But more often than not, Ebest contends, “the focus is on teaching strategies rather than on underlying theories” (2005, p. 43). According to Ebest (2005), theories most often employed in pedagogy workshops and courses include: Bartlett's (1932) schema theory, which argues that individuals learn from experience; Gardner's (1983) eight areas of multiple intelligence, which highlight approaches to learning such as linguistic, musical, logical-mathematical, spatial, bodily-kinesthetic, interpersonal, intrapersonal, and naturalistic; Sternberg's (1997) triarchic theory, which states that intelligence is not only

multidimensional but also context-dependent; and Bandura's (1977) theory of self-efficacy, which is based on one's self-perception of being capable.

These theories inform pedagogical beliefs and practices. TAs who understand how these theories work in context can use instructional methods that engage and support their students' learning. For example, assignments and class activities can be designed to tap into several of Gardner's multiple intelligences, and in turn, build students' self-efficacy. Without teaching future faculty the scientific basis for learning, their understanding will remain peripheral; not doing so will continue to limit their teaching potential. Smith and Waller (1997) predict a shift from a focus on teaching to a focus on learning.

Develop positive stakeholder relationships. Identify stakeholders and work to develop positive relationships. TA training and faculty development are not simply about building a relationship between those teaching and those learning (Wulff & Austin, 2004). Many different individuals—current doctoral and master's students, graduates in the workplace, faculty, faculty developers, deans, graduate school administration, campus administration, the community, and those receiving the education, undergraduate students—are all stakeholders in developing future faculty. All of the above parties should be involved in conversations about graduate education. Investing in dialogue and effective strategies for improvement will benefit the individuals involved, the institution, and the community at large.

Shift perspectives on faculty development. We need to take a critical theory perspective on faculty development. Brookfield (2004) argues that “critical theory regards dominant ideology not as a value-free descriptor of whatever set of beliefs the

majority of citizens live by but as inherently manipulative and duplicitous” (p. 40), meaning that critical adults should take action to create a more democratic and just society fighting all types of oppression. In terms of faculty development, this means asking big questions, such as: What makes a good teacher? Why do we teach? When do we know that learning is happening? How do we define learning? What does it mean to teach critically? What does it mean to teach ethically? How and when do we abuse our power as teachers? (Brookfield, 2004). These questions need to be asked and discussed in several forums in order to have an understanding of our beliefs and how these beliefs affect our roles and identities as teachers and faculty members.

New Faculty Teaching Scholars (NFTS) was a voluntary program for new tenure-track faculty at our university that provided teacher training similar to the CUT program, and included workshops, conferences, and retreats. Like the CUT program, it provided a model of good teaching for the campus and the university system. Faculty examined the above critical questions, and this was a step toward legitimizing teacher training programs in higher education. Unfortunately, due to budget constraints, this program was suspended in 2009. However, the creation of this program demonstrates the university’s acknowledgement of the need to support good teaching.

Further research on teacher development programs is needed. Further quantitative and qualitative studies are called for in the field. Several studies have been conducted in the last ten years related to TA training and PFF. These include: “The Development of Graduate Students as Teaching Scholars: A Four-Year Longitudinal Study” (Wulff, Austin, Nyquist, & Sprague, 2001); “The Survey of Doctoral Education and Career Preparation: The Importance of Disciplinary Contexts” (Golde & Dore,

2004); “Theories and Strategies of Academic Career Socialization: Improving Paths to the Professoriate for Black Graduate Students” (Antony & Taylor, 2004). Also included in this list is the study mentioned earlier in the literature review: “An Exploration of the Landscape of Graduate Courses on College/University Teaching in Canada and the USA” (Schonwetter, Ellis, Taylor, & Koop, 2007) which looks most closely at the course content of teaching university courses. “TA Teaching Effectiveness: The Impact of Training and Teaching Experience” (Shannon, Twale, & Moore, 1998), on the other hand, is a quantitative study on the impact TA training has had on undergraduate students and TA self-perceptions on online teaching effectiveness factors.

More research is needed on the effectiveness of particular aspects of both TA and PFF programs. Also needed is longitudinal data on how programs contribute to the success of former graduate students/new faculty. Mentoring is a key element of graduate education (Phillips & Pugh, 2000; Roberts & Sprague, 1995), and while it has been established that mentoring can have a large impact on students’ perception of the quality of their graduate experience (Katz & Harnett, 1976; Luna & Cullen, 1998), more research is called for in this area to examine expectations of an ideal mentoring relationship (Rose, 2003) as well as the use of the Socratic portfolio (Border, 2002), which “encourages graduate students and faculty to engage in a conversation about faculty roles and responsibilities, while addressing and developing graduate students’ goals and objectives” (p. 739).

More mixed methods research on the growth of Teaching Assistants’ self-efficacy in TA training programs is also called for. Understanding how and if self-efficacy develops will help predict one’s effectiveness as a future faculty member. With self-

efficacy, Teaching Assistants analyze past teaching performances and develop beliefs about their personal capabilities. Successful teaching experiences contribute to positive efficacy beliefs whereas failed teaching experiences undermine one's sense of efficacy (Mills, 2011). Further studies on Teaching Assistants and self-efficacy have implications for re-envisioning Teaching Assistant training.

Also, research should be conducted on individual programs from a holistic perspective. Stanford University recently published a booklet called “What’s Working in TA Training 2008” conducted by members of the Stanford TA Oversight Committee (TAOC), examining whether TAs are being trained properly for their teaching responsibilities. According to the Stanford survey, TA training programs are most effective when they hold orientation seminars at the beginning of the year for new TAs; provide opportunities for practice teaching; have a mentoring component; offer professional development opportunities; give evaluation opportunities for TAs; and have an archive system for TA training materials, all of which the CUT program offers to its Teaching Assistants.

Finally, research needs to clarify best practices of TA and PFF programs and how to achieve them. One of the greatest challenges to preparing future faculty remains resistance from some of the stakeholders; having data to support these practices helps to improve and legitimize the field.

Study Summary

This study examined a voluntary Teaching Assistant training program at a Midwestern university. The essence of this study is the stories of the 23 Level 2 and Level 3 CUT Teaching Assistants who comprised the CUT participant cohort, as well as

the observations and informal interactions with an additional 17 L1 participants. Their varied experiences illustrate a continuum of learning (Figure 5.1). Their progress, although occurring at varying levels, shows that CUT participants did indeed learn about how to improve teaching at the university level.

The Learning Continuum Taxonomy based on the data analysis of this study provides one reference for future research on developing university level teacher development programs. The taxonomy organizes the range of CUT participant abilities and characteristics within a set of descriptive categories. While these categories describe Teaching Assistant behavior in this particular study, university faculty may identify these behaviors in their own students. This taxonomy is useful in identifying and understanding how Teaching Assistants experience the learning process. This taxonomy illustrates that learning is both complex and messy; rarely do students experience a linear path of academic growth.

This taxonomy also shows that context matters—contextual factors, including learning style, modeling, personality, motivation, culture, attitude, engagement, workload, and freedom of choice—situates a community of practice and its individuals and gives educators a way to unpack these influences in a more nuanced way. This study asserts that Teaching Assistants can benefit from a pedagogical training program in a relatively low risk environment; as such it supports the argument that relationships among students, faculty, and content are not fixed and are always changing (Wulff, 2005). Nevertheless, keeping in mind that the main goal of Teaching Assistant training is to help graduate students become effective educators for their students, TA developers

can benefit from taking a critical look at how we function as teachers and mentors, for this will help us to model best teaching practices.

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Appendix A: Certificate in University Teaching (CUT)

CERTIFICATE IN UNIVERSITY TEACHING (CUT)

Session Title _____

Date _____

Feedback guides our future planning. Please tell us what you think about this program. Thank you.

	Very Helpful					Not at all				
1. The program was informative.	5	4	3	2	1					
2. The topic was relevant.	5	4	3	2	1					
3. The information was useful.	5	4	3	2	1					

4. What were the most important things you learned?

5. What information will you apply to your teaching?

6. In which areas would you like additional help or more information?

7. What suggestions do you have to improve the program?

8. Additional comments or suggestions:

Name and/or department (optional) _____

Center for Teaching and Learning
University of Missouri-St. Louis

Appendix B: CUT Observation/ Feedback Form

CLASS INSTRUCTION OBSERVATION / FEEDBACK FORM

Instructor Name _____ Date _____

Observer Name _____

*Rating Scale: Excellent (E), Very Good (VG), Good (G), Below Average (B) Poor (P),
Not Applicable (NA)*

	<u>Rating:</u>	<u>Comments:</u>
Overall evidence of preparation:	_____	
Instructor confidence level	_____	
Control of class	_____	
Rapport with class	_____	
Enthusiasm	_____	
Class climate	_____	
Overall instructional activities	_____	
Match between objectives and activities	_____	
Variety of activities	_____	
Appropriateness of activities	_____	
Student involvement	_____	
Overall communication skills	_____	
Speaking clarity	_____	
Eye contact with students	_____	
Non-verbal behavior	_____	
Use of board and/or AV aids	_____	
Asking questions	_____	
Mix of questions	_____	
Listening to student responses	_____	
Responding to student questions	_____	
Mix of teacher talk and student talk	_____	
Quality of handouts and/or AV aids	_____	
Overall structure/organization of instruction	_____	
Attempts to link new material with previous knowledge	_____	
Use of examples	_____	
Overall organization of class:	_____	
Opening	_____	
Review	_____	
Clarity of instructional objectives	_____	
Conclusion	_____	

Appendix C: CUT Intake Interview Protocol

CUT Intake Interview Protocol

Note: This is a semi-structured interview.

1. Describe your educational background and that of your immediate family members.
2. State your degree program and your current duties as a teaching assistant.
3. How did you hear about the CUT program?
4. Why did you join the CUT program?
5. What are your expectations of the CUT program?
6. What have you learned so far in the CUT program?

Appendix D: CUT Exit Interview Protocol

CUT Exit Interview Protocol

Note: Some participants will not have completed an intake interview.

- 1. Please describe your educational background.**
- 2. What degree program are you in at UMSL, and what is your current graduate teaching assistantship? How long have you held this position?**
- 3. What are your primary duties in this position?**
- 4. Do you have any prior teaching experience? If so, please describe.**
- 5. What kind of departmental training did you receive before you began your graduate teaching assistantship? Be as specific as possible. In what ways did this training prepare you for your role as TA?**
- 6. Did you attend the campus-wide annual TA/RA Professional Development Conference? Where did you hear about it? Was it required in your department?**
- 7. How helpful was the conference in preparing you for your role as TA?**
- 8. How did you hear about the CUT program?**
- 9. Please discuss what you have learned in each unit of the CUT program.**
- 10. Has participating in the CUT program contributed to your teaching strategies? In what ways?**
- 11. Has participating in the CUT program contributed to your assessment strategies? In what ways?**
- 12. Has participating in the CUT program prepared you for the job market? In what ways?**
- 13. Has your attitude about teaching changed from start to completion of the CUT program?**
- 14. What was the biggest challenge for you in the CUT program?**
- 15. Are you planning on teaching after receiving your degree?**

Appendix E: Demographic Information**DEMOGRAPHIC INFORMATION**

Please answer the questions that follow. Please check the appropriate block or fill in the appropriate information.

1. Age:

20-25__

26-30__

31-35__

36-40__

41-45__

46-50__

50-55__

55+__

2. Race/Ethnicity

African-American/Black__

Asian-American/Pacific Islander__

Caucasian/White__

Hispanic or Latino/Latina__

Multiracial__

Native American/Indian/Alaskan Native__

Other (please specify)_____

3. Sex:

Male__

Female__

4. Please indicate the number of semesters of previous experience you have had as a Graduate Teaching Assistant (GTA):

0 ____
 1 ____
 2 ____
 3 ____
 4 ____
 5 ____
 6 ____
 6+ ____

5. Please indicate the number of semesters of previous teaching training that you have received as a GTA:

0 ____
 1 ____
 2 ____
 3 ____
 4 ____
 5 ____
 6 ____
 6+ ____

6. For how many separate courses (NOT sections of courses) are you currently a GTA?

1 ____
 2 ____
 3 ____
 4 or more ____

7. For how many separate sections of the same course are you currently a GTA?

1 ____
 2 ____
 3 ____
 4 or more ____

8. Do you plan on a full time career in teaching/academia after graduation?

Yes ____
 No ____

9. Which description **best** fits your **current** GTA responsibilities? (**Check one**)

A. Primary instructor (GTA teaches independently)- e.g. choose texts/readings for class, establish course syllabus, develop and/or deliver all course lectures and lab/discussions, construct/administer/evaluate all course exams, establish grading criteria and assign grades, hold office hours to assist students, have students complete evaluations on your teaching.

Appendix F: Initial Codebook Categories

In-class activity	Theory
Wimbians	Positivistic
Theory	Social Constructivist
Positivistic	Learning strategies
Social Constructivist	Teaching methods
Learning strategies	Critical examination
Teaching methods	Fallacious argument
Critical examination	Effective teacher
Fallacious argument	“Teaching virtues”
Effective teacher	Pedagogy
“Teaching virtues”	Resolving conflict
Pedagogy	Classroom diversity
Resolving conflict	Lecturing
Classroom diversity	Study guide questions
Lecturing	Discussion session
Study guide questions	Peer pressure
Diagram	Free writing assignment
Objectives	Historical context
Syllabus	Instructional design
Positive feedback	Student journals
Critical feedback	Online quiz
Historical knowledge	American Sign Language

Exam	Collaborative strategy
Pacing	Pair and share
Note-taking	Wait time
In-class writing assignment	Look up definitions
Debate	PowerPoint
Engaging students	Lab questions
Cognitive learning theories	Vigorously
Ethical theories	Elementary
Exasperation	Office hours
Flashcards	Current events
Thank you card	Expectations (of Practicum)
Vase of flowers	Procrastinated
Teaching portfolio	Demographic
Letter of recommendation	Unprepared
Adjunct teaching positions	Worst teaching experience
Goals	Distracting
Active learning exercises	Participation
Microteaching experiences	Attendance points
Teaching deficiencies	Debate format
Philosophy statements	Weak points
Lesson plan review	Highly satisfied
Reflection reading	Conduct the review
Finding a balance	Switch up the format

Service project	Marked improvement
Civic engagement	Small group work
CUT meeting	Gained confidence
Mentor	Exciting
Course evaluations	Interesting
Critical view of my growth	Summarizing
Think outside the box	Independent, critical, free thinkers
Improving future instruction	Actively engaged in their learning
Brainstorm	“Drill and kill”
Motivation	Frustrating
Rubric	Aggravating
Encouragement	Learning as two-way street
Confused	Let go of the reins
TA/RA Conference	Discovering
Inexperience	Exploring
Manage my time wisely	Hypothetical situation
	Focus on process