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by

Michelle L. Davis

December 2017

TECHNICAL COLLEGE FACULTY INTERPRETATIONS OF PROFESSIONAL  
DEVELOPMENT ON INTENDED INSTRUCTIONAL STRATEGIES

A Dissertation Proposal Presented to the  
Faculty of the College of Education  
University of Houston

In Partial Fulfillment  
Of the Requirement for the Degree

Doctor of Education

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Approved by Dissertation Committee:

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Dr. Sara McNeil, Chairperson

---

Dr. Mimi Lee, Committee Member

---

Dr. Migonette Mountain, Committee Member

---

Dr. Susie Gronseth, Committee Member

---

Dr. Robert H. McPherson,  
College of Education

December 2017

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## Dedication

As educators, we may never know the impact we make in a person's life. I dedicate this dissertation to Gail Ridgeway. As my advisor, she convinced an 18-year-old me that dropping out of college was not the right choice. I would not have made it this far in life without her 30 years of advice and love. Thanks for everything Mom2.

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## Abstract

**Background:** Faculty who teach in technical colleges are considered content experts, but may lack teaching experience in the college classroom. The Center for Community College Student Engagement conducted a nationwide survey of community and technical colleges and found that students participating in active and collaborative learning activities experience higher levels of engagement in the classroom and higher levels of success. It may be necessary to provide professional development for technical college faculty to improve active and collaborative learning in the classroom. Purpose: The purpose of this study was to explore technical college faculty's interpretations of scholarly teaching and examine their intentions to alter classroom teaching in future semesters after participation in a professional development program called *Scholar to Scholar*. **Methods:** Six faculty members of a small technical college (STC) located in Texas participated in *Scholar to Scholar*. This qualitative study used Carspecken's three-stage method of critical ethnography: 1.) compile the primary record through monological data, 2.) preliminary reconstructive analysis, and 3.) dialogical data generation. Questionnaires, classroom and *Scholar to Scholar* program observations, and interviews of participants were collected and coded for themes. **Results:** Faculty participating in the *Scholar to Scholar* program shared that they intend to use the information learned in the professional development sessions to improve the instructional strategies in their classroom but in varying degrees. The results of this study may assist faculty developers and technical college administrators in implementing effective professional development for faculty, especially for those who lack teaching experience. **Conclusion:** Faculty members teaching in technical colleges i professional development

related to teaching to make them aware of instructional strategies that engage students in the classroom. Contributions to the literature, limitations, recommendations for future *Scholar to Scholar* programs, and recommendations for future research are included in this study.



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## **Chapter 1**

### **Introduction**

Community and technical college faculty, considered experts in their field, are not traditionally trained as educators and may not be provided opportunities to learn the techniques needed to improve teaching and the learning environment for their students (Darling-Hammond et al., 2009). Often, faculty have held positions in business and industry before teaching at community or technical colleges (Olson & Spidell, 2008). Faculty must have prior work experience and/or Associates, Bachelor's or Master's degrees depending on the subject area taught, to be qualified to teach in a technical college. However, faculty are not required to have coursework in education or pedagogy. Although qualified to teach, faculty may have little to no teaching experience before beginning to teach in the college classroom. Their work experience, while beneficial, may not translate into solid, student-engaging teaching practices in the classroom.

### **Statement of the Problem**

Faculty teaching in technical colleges are considered content experts but may lack teaching experience in the college classroom, relying on traditional instructional approaches such as lecturing and whole group discussion (Fletcher, Djajalaksana, & Eison, 2012) and teaching as they remember being taught. There is an expectation that faculty in technical colleges need to learn to teach beyond ways they may have experienced for themselves, with active and collaborative learning being a concept listed as "a good practice in undergraduate education" (Chickering & Gamson, 1987, p.3). A nationwide survey of community and technical colleges found students who participate in active and collaborative learning activities experience higher levels of engagement and

success in the classroom (Center for Community College Student Engagement, 2010). This information makes it necessary to provide professional development to technical college faculty, not just in basic classroom management, but also in scholarly teaching strategies.

Research on teaching in technical colleges is limited at best with the majority of research focusing on community colleges. Although there are similarities between the two types of schools, there are marked differences, namely the faculty and the programming offered. This study focused on the experiences of faculty teaching at a technical college who participated in a faculty development program in scholarly teaching, similar to Cox's faculty learning communities, called *Scholar to Scholar*.

### **Purpose of the Study**

Faculty are responsible for educating students that are diverse, not only in their backgrounds, age, and inspiration but also in their readiness for college (McIntosh & Rouse, 2009). Though they are not taught how or why to do so, technical college faculty are responsible for creating effective and engaging learning environments for all of the types students. The purpose of this study was to investigate participants intentions to use information obtained in the *Scholar to Scholar* professional development program to improve their scholarly teaching strategies for future semesters.

### **Research Question**

The following research question was intended to provide answers to the dilemma presented in the statement of the problem:

RQ: What are the interpretations of technical faculty regarding the Scholar to Scholar professional development program's impact on their intended instructional strategies?

This research question is intended to investigate the impact experienced by faculty who participated in a professional development program designed specifically to encourage their learning of teaching strategies, including active and collaborative learning, and then to make changes to current teaching strategies in their classrooms.

### **Significance of the Problem**

Faculty may think they are not able to do much to influence student success; some students will succeed, and some will fail regardless of what they do (Perez, McShannon, & Hyneds, 2012). Faculty are not able to "make" students learn or "make" them come to class (Perez et al., 2012). However, students are more likely to be engaged and successful if supported by teachers who establish inviting learning environments, have high standards for their students, challenge students, and make themselves available to discuss academic progress (Bryson & Hand, 2007). For students to engage and be successful, it is up to faculty to engage students by how "they intentionally structure the learning experience" (McClenney, Marti, & Adkins, 2004, p.1).

If students are not engaged in the classroom, could it be because faculty do not know how to engage those students? Statistics for all two-year schools in the United States show the importance of addressing this lack of engagement; in 2012, approximately 7.2 million students attended community colleges across the country with only one million associate's degrees being awarded (Snyder, 2014). Annually, only 52% of first-time college students' return for their second year (Center for Community College

Student Engagement, 2010), and fewer than 39% have met their goal of a degree or certificate six years after starting (Center for Community College Student Engagement, 2016). These statistics support the need for change in the typical college classroom, and this includes technical colleges.

### **Educational Value of the Study**

This study may prove to be of educational value in understanding components of faculty development in scholarly teaching evidenced by intentions to change teaching or implement recommended classroom strategies. Faculty often attend or participate in professional development webinars, conferences, and seminars related to their content area. Such sessions may last from 1 hour to several days. The information at these conferences may not necessarily be designed for technical college faculty, may not be of interest or useful to faculty, and may not be related to teaching. The relationship between content and practice may not be a focus of such presentations. Also, enthusiasm sometimes wanes from the time of participation to actual implementation of the strategies in one's teaching practice.

The *Scholar to Scholar* program sought to address these issues. Participants in *Scholar to Scholar* attend six seminars and six separate working sessions over the course of one semester and focused on engaging, active, and collaborative learning through scholarly teaching. Presenters in *Scholar to Scholar* embedded research on effective teaching practices to create their presentation, and demonstrate these methods to participants. The intention of this professional development program was to equip faculty in updating their instructional design and teaching practices for a course of their



choosing, to increase student engagement. Follow-up with participants and involvement in the professional learning occurred during the year that followed.

### **Definitions**

**Active Learning:** Conscious engagement and effort by the teacher to create excitement and enthusiasm for students with the goal of understanding the subject matter at hand (Awedh, Mueen, Zafar, & Manzoor, 2014; Michael, 2007). Active learning requires teachers and students alike to become involved in the process of learning by doing and involves applying the material while it is still being presented (Amburgh, Devlin, Kirwin, and Qualter, 2007).

**Collaborative Learning:** Learning that occurs in the classroom or outside of the classroom while working in groups. Along with active learning, it is one of the predictors of student success including higher grades and course completion (McClenney et al., 2012).

**Engagement:** Students perception concerning interaction with teachers and fellow students in the learning process and their general involvement with the topic. Changes in the social and academic environment can modify these perceptions of engagement (Blasco-Arcas et al., 2013). Students learn better when they engage with the material, their peers, and their instructors. Engagement is a predictor of motivation and performance (Shernoff & Hoogstra, 2001).

**Faculty or Professional Development:** Formal or informal efforts to improve knowledge in a skill or discipline, including teaching in the discipline. It may include workshops, continuing education courses, and participation in professional organizations

(Hardre, 2012). Faculty development and professional development are used interchangeably in this study.

**Faculty Learning Community (FLC):** A group of six to fifteen faculty from varied disciplines who engage in an active and collaborative series of seminars and activities. The community is designed to enhance teaching and learning as well as scholarship (Cox, 2004). Cox (2016) further defines FLCs with the characteristics of being at least one year and having the goals of “building community, engaging in scholarly (evidence-based) teaching and the development of SoTL” (Scholarship of Teaching and Learning). Also called Communities of Practice (CoP).

**Participant (Participating) Scholars:** Faculty selected to attend and participate in *Scholar to Scholar*.

**Presenter (Presenting) Scholars:** Faculty selected to present information to participant scholars in *Scholar to Scholar*.

***Scholar to Scholar:*** A locally developed professional development program created by the researcher at the observed STC.

**Scholarly Teaching:** Teachers base teaching strategies on research and select the method having the best chance of helping the students work towards and achieve a specific objective (Richlin, 2001). Not to be confused with the Scholarship of Teaching and Learning.

**Scholarship of Teaching and Learning (SoTL):** SoTL is the sharing of results of scholarly teaching in a peer-reviewed manner, such as submission to a peer-reviewed journal or presenting at conferences (Richlin & Cox, 2004). Not to be confused with Scholarly Teaching.

**Technical College:** A type of two-year college providing skills related to a vocation or trade, with minimal academic coursework required. Degrees (Associate of Applied Science) and certificates earned by students have the goal of the student heading to work after two years. The diplomas of Associate of Arts (AA) and Associate of Science (AS), which are academic degrees, are granted with the goal of transfer to a University.

### **Limitations and Assumptions of the Study**

For faculty development to be successful, it is important to have buy-in from the faculty being asked to participate (Mosley, 2015). Faculty involved in *Scholar to Scholar* did so on a voluntary basis. Faculty commitment to regular attendance in the series of presentations and follow-up meetings may prove to be a limitation. Faculty are often involved in committee meetings, grading, student conferences, or other job-related activities the faculty may deem more important than attending faculty development.

This study focuses on investigating the intentions of faculty to implement strategies learned in Scholar to Scholar versus investigating the actual implementation of strategies. This may be a limitation of this study.

One assumption of the study is all faculty participating in the program are doing so voluntarily and seek to improve their teaching. The *Scholar to Scholar* participants under the researcher's direct supervision were not part of the research data collected for this study to control for researcher bias.

### **Background and Creation of *Scholar to Scholar***

"Education is the only field where we do not teach students how to learn, and we do not teach educators how to teach" (T.Zakrajsek, personal communication, January 5, 2015).

One statement; both setting my mind at ease that I was not alone in my experiences as a college faculty, and building my desire to improve as an education professional.

Since I was a child, I wanted to be a teacher. Life sometimes takes us off our intended path. Instead of becoming a teacher, I became a social worker, a career I followed for 11 years before attending graduate school. As a social worker, I attended hundreds of hours of professional development, which I enjoyed much more than most of my co-workers. I enjoyed watching the facilitators and trainers and remember being in absolute awe of their abilities to stand in front of everyone and engage the participants through activities, inspirational stories, and motivational presentations. Although I had no experience or training in teaching and pedagogy, I knew when I walked into my first college course as the instructor, I found the career I am meant to do. I was able to transfer what I learned from teachers and trainers and incorporate it into my classroom.

Over the past twelve years, I have gone from teaching as an adjunct at five campuses to being a department chair with an average of 45 faculty under my supervision. As a department chair, I discovered most of the people teaching at the college level have never received formal training in teaching. I have observed faculty who are absolute naturals in the classroom, and I have observed faculty who struggle with communicating their content knowledge to others, regardless of their work experiences.

After hearing Dr. Zakrajsek's comment at a teaching conference, I knew the next course of action. Small Technical College (STC) has not had any continual professional development for faculty and no professional development related to teaching. I have always been interested in professional development but thought, "Who am I to create

professional development?" Then I realized with my experiences, education, and my questions at hand, the real question is "Who am I to NOT create professional development?" And so I did.

***Scholar to Scholar.*** *Scholar to Scholar* is a campus-wide professional development program developed for faculty at all stages of their career, to experience scholarly teaching by the presenters, with emphasis on student and teacher perceptions, engagement of students in the classroom, instructional design and use of current technologies for engagement. Participation in the semester-long seminar series occurs after an orientation session and agreement to participate. Following participation in seminars, faculty continue involvement formally and informally with members of their cohort for up to 12 months. Department chairs nominate faculty for participation, but participation in *Scholar to Scholar* is voluntary. Participant scholars may attend as part of a professional improvement plan (created after poor student evaluations or poor faculty evaluation), to enhance their skills, as a new employee, or to invigorate mid-career and end of career faculty.

Before the first session, faculty attend an orientation covering the background of *Scholar to Scholar* and its educational foundation. Participants complete a brief questionnaire during Orientation, asking how they learned to teach, the best and worst professional development experiences, what makes them a good teacher, and what the participant wants to learn to become an excellent instructor (See Appendix A). Classroom observations are conducted after the orientation, but before the start of the *Scholar to Scholar* sessions (See Appendix B). The expectation for the observation is faculty do not do anything “special” beyond what is normally done in class.

Following the classroom observations, participants attend six seminars, with each seminar meeting two times within the same week. In Spring 2017, faculty were scheduled to meet on Tuesdays and Thursdays from 12:30 pm – 1:50 pm during six nonconsecutive weeks.

Project-based faculty development has shown to improve faculty perception of professional development (Gusic et al., 2010). Faculty participating in *Scholar to Scholar* selected one course to be taught in the following fall semester to serve as the 'project class.' The instruction was for the participant to choose one significant item from each session topic to implement during the semester. During orientation, it was stressed that no one should attempt to change 'everything' about the project course, as that would be overwhelming.

Chairs of the five departments, including myself, recommended faculty to be presenters. Of the six presenters from this series, five are currently working towards obtaining a Doctoral degree in education. Presenters attended a series of meetings in the fall semester to plan topics for the following spring semester. During these meetings, I spoke with each presenter regarding the requirements for the creation of each seminar in *Scholar to Scholar*.

Presenting scholars created individual sessions with the following criteria provided:

- a. Research must support information
- b. Modeling of the learning or teaching strategy during the seminar
- c. Formative assessment
- d. Opportunities to work as a community and in small groups
- e. Summative assessment
- f. Materials, including articles associated with presentations, are posted to Blackboard. Participants are provided paper copies in a binder.
- g. Follow-up discussion through Blackboard

- h. Use of classroom and computer labs as needed.

By sharing scholarly teaching experience with others, presenting scholars are engaging in and providing an example of the Scholarship of Teaching and Learning (SoTL). Presenting scholars teach and model instruction during the interactive sessions. Presenters submit materials for the program to STC's Learning Management System for use in the sessions. Presenters were welcome to attend all (each other's) sessions.

The following seminars were scheduled for Spring 2017:

1. Teacher and Student Perception
2. Designing Materials to Engage the Classroom
3. Faculty Engagement and Retaining Students in the Classroom
4. Building Relationships Through Effective Communication
5. Facilitating the Classroom
6. Instructional Design: Putting it all together

The third session, Faculty Engagement and Retaining Students in the Classroom, was canceled because of the presenter's serious illness.

## **Summary**

This chapter presented an introduction to the need for the development of scholarly teaching for technical college teachers, a statement of the problem, the purpose of the study, context for the study, research questions, significance of the problem, education value, definitions, limitations and assumptions of the study. This chapter concluded with the background and creation and description of *Scholar to Scholar*. Chapter II provides a review of the literature relevant to this study.

## **Chapter II**

### **Review of the Literature**

Chapter Two builds on the contextual framework for this study by incorporating relevant research and theory, the key to presenting the topic of this study. This chapter contains four sections. The first section presents information on technical colleges, faculty, and students. The second section presents information on the Scholarship of Teaching and Learning (SoTL) and Scholarly Teaching. The third section presents information on active and collaborative learning, and the fourth section presents information on faculty and professional development.

#### **Technical Colleges, Faculty, and Students**

Technical colleges are referred to as Career and Technical Education (CTE) colleges. CTE colleges provide students with an opportunity to receive both academic and career education (Morris, 2010). They are grounded in the assumption that not everyone needs to have a 4-year degree to be successfully employed, but that some postsecondary education is usually necessary, be that a two-year technical degree, apprenticeship, military or formal employment (Morris, 2010).

Technical colleges are facing some pressing challenges. According to the Center for Community College Student Engagement (2016), students in two-year schools frequently report academic goals not matching their reality. Sixty-one percent of students expect to attain a two-year degree within two years, but only 39% of students will do so within a six-year period (CCCSE, 2016), a number down from 45% in 2010 (CCCSE, 2010). At the six-year mark, eighteen percent of students continue enrollment at the two-year school, and 43% are no longer enrolled in school. Students attending two-year



colleges, community and technical, believe they have prepared academically for the challenge of college coursework, but 68% of students require at least one developmental education course, with 40% of students who self-report being an "A" student in high school required to take developmental education in college (CCCSSE, 2016). Further, students in technical colleges typically expected to get higher grades for their first-year courses than did students from universities, with women typically expecting higher grades than men (McCann, Immel, Kadah-Ammeter, & Priniski, 2013).

Technical and community colleges are open-door institutions granting admission to all applicants, resulting in a student body population made up of students having a broad range of academic abilities and backgrounds (Wallin & Smith, 2005). Because of open enrollment, many first-generation students choose to attend technical or community colleges, along with those having physical, emotional and learning disabilities (Wallin & Smith, 2005). Faculty are responsible for educating students that are diverse not only in their backgrounds, age, and future goals but also in their readiness for college (McIntosh & Rouse, 2009). Technical educators may not recognize teaching expertise as formal knowledge, instead relying on experienced teachers for mentoring relationships to learn the teaching role (Eddy, 2010; Shim & Roth, 2008). Wilson (2000) found technical instructors preferred teacher-centered classrooms, taught by lectures, concrete examples, and low student participation.

**Accreditation.** Technical colleges are accredited institutions of higher education similar to community college and 4-year colleges and universities. Colleges offering associates, bachelors, masters, and doctoral degrees in the southern United States have

accreditation by the Southern Association of Colleges and Schools Commission on Colleges (SACSCOC, 2010). A school must have the following to maintain accreditation:

- A mission that is appropriate to higher education
- Resources, programs and services offered to accomplish and sustain that mission, and
- Clear, educational objectives consistent with the established mission and appropriate to the degrees offered and demonstrated success in completing stated objectives.

SACSCOC's decisions on accreditation follow a hierarchy of guidelines. Faculty development is Comprehensive Standard 3.7.3 required by SACSCOC (2011, p.31) stating, "The institution provides ongoing professional development of faculty as teachers, scholars, and practitioners (2011, p.31)." Comprehensive Standard 3.3.1.1, related to Institutional Effectiveness, requires that accredited entities provide educational programs which include student-learning outcomes. Faculty development helps agencies meet this standard.

**Funding.** In 2006, President G.W. Bush signed the Carl D. Perkins Vocational and Technical Education Act of 2006, designed to improve the overall education experience of technical students and to develop relationships between secondary and postsecondary education. For technical colleges operating in the state of Texas, this act provides accountability on both a state and local level for specific standards of quality and disbursement of funds to technical schools and colleges (Texas Higher Education Coordinating Board, 2016). The Perkins program prepares students for "high-skill, high-wage, or high-demand occupations" (Texas Higher Education Coordinating Board,

2016). In Texas, 57 community, state and technical colleges provide postsecondary Career and Technical Education (CTE) on 79 campuses. In the fiscal year 2015, Texas received \$91,909,431 in Perkins funding (Association for Career and Technical Education, 2016).

The Carl Perkins Grant program measures success by an institution's ability to meet standards in six Core Indicators. The US Department of Education's Office of Career, Technical, and Adult Education (OCTAE) and the Perkins Grant Program (Texas Higher Education Coordinating Board, 2016) negotiate the six Core Indicators and Standards. Most relevant to this discussion is standard 2P1 which addressed the need for instructors and teachers to have professional development to increase the number of students earning a credential, certificate, or diploma.

### **Scholarship of Teaching and Learning (SoTL) and Scholarly Teaching**

**Scholarship of Teaching and Learning (SoTL).** The Scholarship of Teaching and Learning and scholarly teaching are vital to the life of the academy (Richlin & Cox, 2004). Although closely related, the two are separate activities, differing in purpose and activity:

The purpose of scholarly teaching is to impact the activity of teaching and the resulting learning. Scholarship of teaching results in formal, peer-reviewed communication in the appropriate media or venue which then becomes part of the knowledge base of teaching and learning in higher education (Richlin, 2001, p.58).

Ernest Boyer (1990, p.68) created a scholarship model that moves beyond the “tired old teaching versus research” of traditional academe. This model is considered the

beginning of the scholarship of teaching. His model describes research as four separate but overlapping functions 1. Discovery, 2. Integration, 3. Application, and 4. Teaching.

1. Discovery: Boyer (1990, p.69) explains discovery is what academics do when they talk about research. The scholarship of discovery contributes to human knowledge and the "intellectual climate" through qualitative and quantitative methods. This research is vital to the intellectual excitement and the life of higher education, especially in the area of medicine.

2. Integration: Boyer (1990, p. 70) describes the scholarship of integration as looking at one's research or the work of others and determining how this information integrates into a larger system, with new insights into how isolated information can fit together. Scholarship of Integration seeks to understand what the findings in discovery research mean.

3. Application: Boyer (1990, p.73) stated that the scholarship of application is bridging the gap between the academy and the rest of the world. Service is part of a professor's review process. By serving community organizations, participating as a presenter in professional conferences and seminars, or consulting outside the university, the academic view can be applied to practice, that is, what others need to understand to use the research.

4. Teaching: Boyer (1990, p.74) stated the work of the professor becomes consequential only as it is understood by others. Teachers should not only be knowledgeable regarding the subject matter they teach, but they also need to be

learners, “transmitting knowledge, but transforming and extending it as well” (Boyer, 1990, p.75).

One weak point in Boyer's description of the SoTL is the lack of a clear line between the scholarship *of teaching* and scholarly *teaching* (Hutchings & Shulman, 1999). Three essential features distinguishing between the two are a) The work must be made public, b) The work must be critiqued and evaluated by others in the field, and, c) The work must be presented in such a way that others can build upon it (Boyer, 1990; Hutchings & Shulman, 1999; Kreber & Sranon, 2000; Richlin & Cox, 2004; Smith, 2001). Faculty not engaging in the peer review process in regards to their teaching are limited in the sharing of their pedagogical knowledge with others and thus are not engaging in the scholarship of teaching and learning (Smith, 2008). Through their work at the Carnegie Foundation for the SoTL, Hutchings and Shulman (1999) add a fourth criterion of question-asking and investigation into student learning to determine if a new teaching method results in an improvement in student learning as compared to a previously used, more traditional method.

**Scholarly teaching.** As scholarly teachers, it is necessary to impact the activity of teaching and also the resulting learning (Richlin, 2001). Teaching must be a carefully planned and continuously examined process, a demonstration of teaching expertise, and disciplinary knowledge (Boyer, 1990; Spath, 2007). Scholarly teaching is well-grounded in understanding the various ways people learn and shifts the focus for learning from the faculty to the students and from learning objectives to active learning and learning assessment (Kincaid, 2009). Outside the classroom, scholarly teaching is part of creating the course design and instructional materials, interactions

between the faculty and student, and a formative and summative assessment of teaching and learning.

To be considered scholarly teaching, Richlin (2001) recommended that teachers must first look at what has been attempted previously in a similar problem or situation. Next, the problem should be turned into a practical question and potential teaching strategies investigated through a review of the literature (Koch, Holland, & Price, 2002). After selecting a teaching strategy thought to have the best chance of helping students achieve the learning objective, the strategy is implemented. Next, the impact on student learning is evaluated (Koch et al., 2012, Richlin, 2001). Richlin (2001) observed that experienced teachers even do this naturally. The scholarly teacher thus stimulates an active learning environment. Boyer (1990) stated,

Surely scholarship means engaging in original research. But the work of the scholar also means stepping back from one's investigation, looking for connections, building bridges between theory and practice, and communicating one's knowledge effectively to students (p. 68).

While many educators find scholarly teaching to be personally fulfilling, its impact on student learning is most important (Kincaid, 2009). The newfound engagement of students in the classroom typically moves teachers to be less teacher-centered and more learner-centered, resulting in a deeper connection among teachers, students, and content (Kincaid, 2009). Though it is recommended that all who teach should strive to be an expert in teaching (Smith, 2001) not all who teach will practice scholarly teaching (Allen & Field, 2005). To become excellent teachers, faculty need to know more about how to teach using technical skills, how to integrate practical skills and theory, and how to

analyze and prepare for deliberate action (Smith, 2001) to be excellent. “Instructors cannot work in isolation, but should instead participate as a community of scholars” (Boyer, 1990, pp. 121-122). Classrooms of students deserve nothing less than the best from their instructor (Ochoa, 2012).

Richlin and Cox (2004) provide a three-phase "continuum of growth" from scholarly teaching towards the SoTL:

1. Phase 1: Teachers grow in knowledge and insight of their teaching and how the students in their classrooms learn.
2. Phase 2: Faculty, aware of themselves and how their classes work, begin talking with others about teaching and learning. These conversations, formal or informal, help teachers to gain a sense of community. These conversations are especially helpful when the conversations are multidisciplinary. Such conversations are instrumental to developing a feeling of a community before faculty move to phase three.
3. Phase 3: Faculty grow in scholarship by working in faculty learning communities (FLC). FLC's provide scholars a place to attend seminars, work on projects and to present information, therefore engaging in the SoTL.

**Challenges.** There are challenges to promoting the SoTL in two-year colleges because it is often not seen as part of the school's mission (Tinberg, Duffy, & Mino, 2007). Annual faculty evaluations and student course evaluations reflect teaching, so faculty do not feel the urgency to create research and SoTL (Tinberg et al., 2007). Two-year college faculty are frequently not funded for participation and attendance in

conferences; therefore opportunities to go public with one's scholarship is limited at best (Tinberg et al., 2007).

Professional certifications and accreditation standards for individual programs in technical college also influence the content and teaching of courses (Dirkx, Kielbaso, & Smith, 2004). With such restrictions, faculty may think they cannot do much to impact student success- that faculty have a fixed mindset -some students will succeed, and some will fail regardless of what they do. Faculty are not able to "make" students learn or "make" them come to class (Perez et al., 2012). However, students are more likely to be engaged and productive if supported by teachers who establish inviting learning environments, have high standards for their students, challenge students, and make themselves available to discuss academic progress (Bryson & Hand, 2007). For students to engage and be successful, it is up to faculty to engage students by how "they intentionally structure the learning experience" (McClenney et al., 2012).

Being a content expert alone does not guarantee excellence in teaching. A study conducted by Peets et al. (2010) found those having process expertise showed a small but significant increase in the learning outcomes of students in a small group setting. Being content experts can hinder the classroom experience for several reasons:

- a. Because content experts have worked in the field, the language used in their classroom instruction is frequently above the students' knowledge base (Peet et al., 2010).
- b. By having unconscious competence, the content expert may provide much more information than is necessary for the student to learn the skill. It may oversaturate a students' ability to process and learn (Peets et al., 2010). Peets



et al. (2010) stated that teachers must move back to conscious competence to be effective in teaching content.

- c. Information created by content experts may not take into account how students learn the material or how teachers should teach the material, making the curricula work against the learning process (Chen et al., 2001).

Medical educators similarly struggle with such issues. After studying medical faculty who had received little to no training on how to be effective teachers, a two-day conference for these educators was created to address issues of good teaching (Srinivasin et al., 2011). One result was an agreement by the medical educators that all should "endorse, value, and practice" learner engagement, learner-centeredness, adaptability, and self-reflection (Srinivasin et al., 2011, p. 1212).

### **Active and Collaborative Learning.**

Active and collaborative learning is constructivism in action (Airasian & Walsh, 1997). Constructivism is grounded in what students already know, their experiences, and how each learner organizes information (Airasian, 2007). People create new understandings from the combination of existing knowledge and exposure to new or challenging information (Airasian, 2007). Constructivism contrasts with traditional learning in that it does not rely on teacher-focused approaches, such as lecture, but is instead based on classroom strategy and practice (Airasian, 2007). The role of the constructivist teacher is to create experiences for students to encourage participation to process and acquire knowledge (Doolittle & Camp, 1999). Faculty must be taught how to be more reflective about their teaching and to be reflective of acquiring knowledge of teaching strategies (Doolittle & Camp, 1999).

The main tenets of constructivism are understandable given that students learn and retain more information if they are actively involved in learning (CCCSE, 2010). It is no longer effective to think learning occurs directly from a teacher-dominated, lecture-type instructional method (Huang, 2006). As Chickering and Gamson (1987, p. 4) said, "Learning is not a spectator sport." Teaching and learning approaches that transfer the responsibility for learning to students are preferable (Engstrom & Tinto, 2008).

A tool used to measure student engagement in two-year community and technical colleges is the Community College Survey of Student Engagement, called CCSSE by administration (McClenney et al., 2012). The CCSSE, designed with the premise that student engagement is significant to persistence, student learning, and academic attainment measures institutional practices and student behaviors unique to community colleges (McClenney et al., 2012). Price and Tovar (2014) analyzed CCSSE data for 166,031 student records and graduation rates from Integrated Postsecondary Education Data Systems (IPEDS) which counts students who are both first time and full-time students graduating within three years. The study found engagement was an important predictor of college completion and statistically significant in predicting graduation rates (Price & Tovar, 2014). Specifically, support for learners and active and collaborative learning yielded the highest impact for students (Price & Tovar, 2014).

The Center for Community College Student Engagement (CCCSE, 2010) published a report stating that students learn and retain more information when they are active as learners, not merely passive recipients of information. Engagement increases retention, persistence in programs, higher grades, completion and quality (Kazmi, 2010; McClenney et al, 2012; Price & Tovar, 2014). Student engagement is a predictor of

college completion and is statistically significant in predicting graduation rates (Blasco-Arcas et al., 2013; Price & Tovar, 2014). Of a variety of instructional and environmental factors, active and collaborative learning and support for learners has been found to consistently have the greatest impact (Awedh et al., 2014; Baepler, Walker, & Driessen, 2014; Blasco-Arcas et al., 2013; Ciani, Summers, Easter, & Sheldon, 2008; Fulton, 2012; McClenney, et al., 2012; Perez, 2012; Price & Tovar, 2014).

**Strategies for active and collaborative learning.** To foster active and collaborative learning, teaching and learning approaches in the classroom must place responsibility for learning with the students, with faculty taking a secondary role to students (Engstrom & Tinto, 2008). Students may initially dislike working in groups and may even dislike an active learning approach. Attitudes tend to improve though as teachers expect more from students, provide less lecturing, and modify assignments (Michaelson, Fink, & Knight, 1997). Students engaged in active learning usually rise to the occasion and report greater levels of empowerment in regards to their perceptions of having control over their learning (Sezer, 2010).

Price and Tovar (2014) stated that colleges and more specifically faculty should:

- a. require students to work together on projects in class,
- b. encourage students to collaborate with their classmates outside of class in preparation for assignments and in-class activities,
- c. provide opportunities for students to tutor other students whether it be paid or voluntary,
- d. commit time outside of class to discuss readings with students, and e.) create learning communities for students.

To improve engagement in the classroom, Perez (2012) suggests simple and easy to implement strategies for instructors. These include using students' names, moving around the room while lecturing, and teaching students to create test questions. Students who have opportunities to engage in intense discussion improve their abilities to think, plan, and act (Huang, 2006).

Working in small groups is an effective active learning strategy, as these groups provide students opportunities to work collaboratively (Center for Community College Student Engagement, 2010). Further, students report greater classroom community and intrinsic motivation when they can select their own groups (Ciani, Summers, Easter, & Sheldon, 2008).

Altering the regular college course by providing a flipped format is an effective active and collaborative learning technique (Baepler et al., 2014). In a study conducted by Baepler et al. (2014), students in a college chemistry class divided into two groups: either the control group, who met in the regular course format and classroom setting, or the experimental group, who had reduced class meetings from three times a week to just once. The control group listened to lectures, watched demonstrations and responded to instructor's questions and prompts. Lecture recordings, small group problem-solving work in class, computer simulations, computer games and the use of clickers to answer questions were provided for the experimental group. The results of this study showed that active and collaborative learning classrooms where the classroom is "flipped" have equal or improved results over the control classroom (Baepler et al., 2014). Students' perceptions of their learning (including the factors of engagement, enrichment, flexibility, effective use, room fit and confidence) improved significantly with the flipped, active

learning classroom (Baepler et al., 2014). This study concludes that it matters less how much time students are present in class and more what they do while they are in class (Baepler et al., 2014).

Fulton (2012) created a top ten list of reasons to use a flipped classroom:

1. Students can move at their own pace.
2. Doing "homework" in class helps teachers be able to see student's learning styles and student difficulties.
3. The curriculum can be updated immediately and available 24 hours per day.
4. With several teachers making the recordings, students have the expertise of different teachers.
5. The teachers themselves flipped professional development by watching each other's videos, allowing them to learn from each other.
6. Classroom time is more efficient than the un-flipped classroom.
7. Parents have access to the student's coursework.
8. Student achievement increases, as does interest and engagement in the higher math levels.
9. "Flipping" is based on research.
10. Using technology fits well with 21<sup>st</sup>-century learning.

Technology can be utilized as part of active and collaborative learning, individually or in groups. Research has shown clickers to be useful in encouraging communication skills in general, and when used for group responses, it increases collaborative learning and student engagement (Blasco-Arcas et al., 2013). Similarly, mobile phone apps such as Socrates can be used to have students answer questions

individually or in groups. Group responses that require problem-solving support student learning and increases student motivation with peers, increased communication and a collaborative spirit (Awedh, Mueen, Zafar, & Manzoor, 2014). Further, students using their mobile phones can create an active learning classroom without the expense of clickers (Awedh et al., 2014).

Another example of promoting active learning for student engagement is a community college's program named GRASP, which stands for Gaining Retention and Achievement for Student Programs (Perez et al., 2012). In this semester-long program, faculty learned basic strategies to make their classroom more active and collaborative (Perez et al., 2012). Faculty were encouraged to do simple tasks such as using the student's name and moving around the room when lecturing (Perez et al., 2012). Working in groups, answering questions on the board, and providing feedback to answers of complex issues were also encouraged.

As part of an effort to have faculty assess their levels of competence of effective classroom instruction to match the needs for faculty development, Georgia Community and Technical Colleges surveyed their faculty. Preparing effective and current instructional materials, utilizing hands-on learning, and providing individual and group instruction ranked as the top three items of competence listed by teachers (Wallin & Smith, 2005). Curriculum integration with other faculty ranked ninth, but faculty reported not having an understanding of how to do this. Faculty were found to be confident in their abilities except for using instructional techniques to help develop critical thinking skills in students (Wallin & Smith, 2005).

**Barriers to active and collaborative learning.** Time is needed for teachers and students to learn and practice how to perform in a constructivist, active and collaborative learning classroom (Airasian, 1997). Teachers have to guide students, instead of telling them how to do something, and to create environments that stimulate opportunities for students to formulate their own meanings. From a constructivist perspective, students have to learn to think for themselves and not be told what to think (Airasian, 1997). Barriers to active and collaborative learning fall into three categories: student characteristics or attributes, faculty characteristics or problems affecting faculty, and pedagogical issues affecting student learning (Michael, 2007).

When first initiated, some students may say that they "hate" active and collaborative learning. This could be because students may not be used to being held accountable for their learning, and are used to learning in a passive manner instead of active learners (Sezer, 2010). High expectations from instructors along with clarification and feedback can cause students to rise to those standards (Sezer, 2010).

The findings from several studies conducted with faculty regarding the use of active and collaborative learning provide similar results. The number one faculty barrier is "active learning requires too much preparation time" with learning the ins and outs of active and collaborative learning, development, class control, student abilities and expectations (Michael, 2007, p.43). Silverthorn (2006) identified the challenges of faculty having a high comfort in using the traditional lecture format and a lack of professional development in how to implement active and collaborative learning strategies. Lack of interest in changing teaching methods, incentives, and people to

facilitate training on how to do active and collaborative learning, are other challenges found in a study of faculty related to instructional desires (Hashim et al., 2014).

These challenges serve as barriers to both the institution and individual faculty. To create the confidence to change instructional strategies and the day-to-day classroom, faculty development in active and collaborative learning strategies is essential.

### **Faculty and Professional Development**

Faculty teaching in technical colleges act not only as teachers but also as coaches, mentors, facilitators, and collaborators in helping students obtain skills for success in 21<sup>st</sup>-century jobs (Sturko & Gregson, 2009). Because technical college faculty are experts in their fields and not necessarily experts in education or teaching, opportunities for them to reinvent themselves as educators are necessary (Sturko & Gregson, 2009). There is a false assumption in higher education that knowledge of the subject matter lends itself to effective teaching (Randall, 2008).

Hardre (2012) provides the following definition of professional development:

Formal or informal efforts to improve your knowledge and skill in your discipline, including teaching in the discipline. It includes workshops and continuing education courses offered in your institution, and through community and professional organizations, as well as less formal efforts such as gathering with colleagues to share expertise (p. 546).

The need for enhanced professional development is an important issue in higher education (Stolzenberg, 2002). Effective professional development should exhibit several of the characteristics found in Table 1.



Table 1  
*Characteristics of Effective Faculty Development*

Institutional support, integrated into the culture of the organization (Darling-Hammond & Richardson, 2009; Hardre, 2012; Kazmi, 2010; Mosley, 2010)
Involvement of teachers in the selection of topics and activities (Blackburn & Williamson, 2010; Hardre, 2012; McClure, 2011; Mosley, 2015; Varela, 2015)
Alignment with curricular standards (Mosley, 2015)
Focus on modeling strategies (Mosley, 2015)
Provide opportunities for active learning with relevant, practical, hands-on activities (Blackburn & Williamson, 2010; Darling-Hammond & McLaughlin, 2011; Lee, 2004; Mosley, 2015)
Promote collaboration during the experience, focusing on sharing knowledge rather than individual teachers (Darling-Hammond & McLaughlin, 2011; Mosley, 2015)
Provide faculty development at staggered times or common planning time (McClure, 2011; Varela, 2012)
Have faculty train each other if there is a tight budget (McClure, 2011)
Differentiated information, not a one size fits all programs (Randall, 2008; Varela, 2012)
Should be about classroom practice (Darling-Hammond & Richardson, 2009; Varela, 2012)
Should be ongoing, not a one-time seminar (Darling-Hammond & Richardson, 2009; Randall, 2008; Varela, 2012)
Adequate physical space (Randall, 2008)
Considered part of the cost of doing business (Watts & Hammons, 2002)
Continually evaluated to determine effectiveness (Hardre, 2012)

Faculty have a greater need for faculty development related to their disciplines and teaching but often have to attend functions to meet institutional goals (Hardre, 2012). Faculty, much like their students, learn best when they are doing, reading and reflecting while collaborating with other teachers (Darling-Hammond & McLaughlin, 2011). Faculty need to be given tools to deal with the wide variety of education and technology levels students of various ages and socioeconomics bring with them to their classrooms

(McClure, 2011). Technical faculty should participate in professional development that is on going, school-based, and collaborative (Sturko & Gregson, 2009). The pathway to becoming a "distinguished educator" generally involves a period of observing and emulating coworkers and the process of trial and error, but changes in educational research cause an increased need for faculty to understand learning theories as part of conducting research and practice (Kay & Kibble, 2016.) Evelyn Waiwaiole, director of the National Institute for Staff and Organizational Development (NISOD), stated, "If we don't orient them [faculty] we will lose them. With the emphasis on student success, retention, and completion, there is an increased awareness of the role of effective teaching" (McClure, 2011, p.29).

Premkumar and Bonnycastle (2006) researched the results of an active learning workshop at a Canadian College of Medicine, an institution where there is little use of games in the learning process. In their article, game theory and its use in different settings was discussed. The authors demonstrated how to create a game with PowerPoint templates with each participant, in turn, being able to work collaboratively to create games. Participants had examples, templates, and articles to use afterward. Premkumar and Bonnycastle (2006) followed up with the participants and found games were used in several courses, and they received requests from the participants for additional workshops.

Students have embraced new technologies and expect instructors to teach with them, but some faculty are not doing so (Archambault, Wetzel, Foulger, & Williams, 2010; Randall, 2008). For students to develop 21<sup>st</sup> century skills for the workplace, it is necessary for them to use technology (Archambault et al., 2010). A series of workshops

about Web 2.0 tools and curriculum planning can aid faculty in changing their role to more of a facilitator with new teaching (Archambault et al., 2010).

**Learning communities.** Learning communities, a type of professional development program, have been successful in bringing together faculty in the scholarship of teaching (Cox, 2004). Dr. Milton Cox (2016), the founder of the concept of Faculty Learning Communities (FLC), defines communities of practice and FLC:

Communities of Practice are groups of people who share a concern or a passion regarding a topic and who deepen their knowledge and expertise in this area by interacting on an ongoing basis. A Faculty Learning Community is a structured, year-long academic community of practice that includes goals of building community, engaging in scholarly (evidence-based) teaching, and the development of SoTL (p. 2).

In learning communities, the content centers on student learning. Faculty buy-in increases the chance of actual classroom implementation and participation by students (Kazmi, 2010). The learning community involves the scholarship of teaching and learning, where individuals share knowledge and expertise (Darling-Hammond & Richardson, 2009). Teachers can collaborate and engage in a conversation examining their practice and student performance to implement more effective practice (Cox, 2004; Darling-Hammond & Richardson, 2009; Makopoulou & Armour, 2014). In this trusting environment, teachers serve as a support group for each other as different strategies and knowledge are shared and reflected upon (Cox, 2004; Darling-Hammond & Richardson, 2009; Makopoulou & Armour, 2014). Cox (2004) provided additional qualities

necessary to build community in an FLC: openness, responsiveness, relevance, challenge, enjoyment, empowerment, and "esprit de corps."

Engstrom and Tinto (2008) stated, "To be effective, learning communities require that faculty and staff change the way they work and, in some cases, think" (p. 50). The mission of a learning community is to understand how students learn content, and then apply that understanding to how content is taught (Stewart, 2014). As a community, the goal is to establish and sustain a community for faculty to collaborate and grow by sharing common interests (Randall, 2008).

To determine if the learning community was effective in helping faculty change their teaching, Cox (2004) suggests looking at the following

- a. How and the degree to which student learning in their courses change as a result of FLC participation
- b. How they knew that it changed
- c. What processes or approaches result in increased learning
- d. The categories of their FLC teaching projects and the degree to which learning changed as a result of those projects
- e. The level of change in student learning due to a change in faculty attitude as a result of community participation.

**Barriers to development.** There are barriers to implementing faculty development. Teachers often complain about professional development opportunities (Varela, 2012) and resist implementing changes in their classroom (Kazmi, 2010; Michael, 2007). Academics perceive themselves as being the expert on their subjects, so teaching is considered an isolated activity, not something to be engaged in with others

(Engin & Atkinson, 2015). Participation in a learning community involves a shift in identity from expert to learner and implies that the current way of doing things is not necessarily the “right” way to do things (Blanton & Stylianou, 2009). Teachers do not want a lecture on how to do things "right" when not shown how the new strategies can work in action (Varela, 2012).

Time constraints with the responsibility of teaching, service to the college, and publishing (in universities) are barriers to attendance in faculty development (Gunersel & Etienne, 2014, Lee, 2004). Faculty interested in development can become resistant and resentful when the content is related to institutional goals instead of goals directly related to them (Hardre, 2012).

### **Summary**

Chapter II provided a literature review of technical college, faculty and students, Scholarly Teaching and the Scholarship for Teaching and Learning (SoTL), active and collaborative learning and faculty and professional development. In Chapter III I will present the information about the participants and setting, methodology, data collection and data analysis procedures. Limitations to the methodology are also discussed.

## **Chapter III**

### **Methodology**

Faculty teaching at technical colleges may have little to no teaching experience before entering a college classroom as the instructor. Many have held positions in business and industry before teaching (Olsen & Spidell, 2008). This work experience, while valuable, may not translate into the effective teaching practice, including being able to engage students in the classroom. The diverse ranges of backgrounds, ages, and inspirations, and college-ready levels of the students attending technical colleges can make the challenge to engage students even more difficult (McIntosh & Rouse, 2009).

#### **Purpose of the Study**

The purpose of this study was to investigate participant's intentions to use information obtained in the *Scholar to Scholar* professional development program to improve their scholarly teaching strategies for future semesters. The research question for this study was:

What are the interpretations of technical faculty regarding the *Scholar to Scholar* professional development program's impact on their intended instructional strategies?

This chapter outlines the methodology that was used to gather and analyze data. The first section of this chapter will discuss the research design and context for the study. The second section of this chapter will address the setting, participants, and confidentiality of the study. The final section of this chapter presents information about types of data collection, data analysis procedures, validity and reliability, and perceived limitations to the study.

## **Research Method**

This study used qualitative research methods to understand the “meaning people have constructed about their world and their experiences” (Merriam, 2002, p. 5). Unlike the quantitative researcher, the qualitative researcher seeks to provide a rich, thick description from studying things in their natural setting. A qualitative researcher attempts to make sense of phenomena regarding meanings people bring to them based on their experiences (Denzin & Lincoln, 2008). Interpretations through observations and interviews provide closer to reality data than “if a data collection instrument had been interjected between us and the participants”(Maxwell, 2013, p. 244). Denzin and Lincoln (2008) provide a metaphor comparing a qualitative researcher to that of a quilter:

A quilter stitches many pieces of selected fabric together much like a qualitative researcher puts many things together at the same time- voices, perspectives, behaviors, and points of view- for their research. (p.4)

This study was designed to follow the first three steps of Phil Carspecken’s (1996) method of critical ethnography, with a focus on the third stage. Carspecken’s method is “meant to be generally applicable to most qualitative research designs (1996, p. 40).

Stage One: Primary record compiled through monological data.

Stage Two: Preliminary reconstructive analysis

Stage Three: Dialogical data generation.

## **Context for the Study**

The research study was conducted at a small technical college located in Texas. This school is referred to as STC (small technical college) throughout this study. STC

offers more than 50 programs, degrees and certificates in five specific departments as shown in Table 2.

Table 2  
*Departments and Degrees at STC*

Department	Degree Earned	Program Name
Allied Health and Sciences	AS	Biological Sciences
	AAS	Dental Hygiene Radiological Technology Respiratory Care
	AAS/Cert	Child Care and Development Diagnostic Cardiac Sonography Diagnostic Medical Sonography Health Information Technology
	Certificate	Occupational Safety and Health Pharmacy Technician
Business Technologies	AA	Business
	AS	Computer Information Systems
	AAS	Computer Networking and Troubleshooting
	AAS/Cert	Accounting Technology CIS Software Applications Management Development Office Technology Administration Real Estate Software Support Specialist
Public Service and Safety	AS	Criminal Justice
	AAS	EMT Paramedic Criminal Justice Security Threat Groups
	AAS/Cert	Homeland Security Homeland Security- CSI Specialization
	Certificate	EMS Paramedic Fire Protection Certification
Technology	AAS	Industrial Mechanics Technology Instrumentation Technology Process Operating Technology
	AAS/Cert	Advanced Engine Technology/Diesel Computer Drafting Technology Heating, Ventilation, and Air Conditioning Welding Technology
	Certificate	Utility Line Technician
General Education/ Developmental Studies	AA	General Education
	AS	Mathematics

Presently, Process Operating Technology, with 538 students, is the largest program, with Instrumentation being the second largest at 328 students. In 2014, STC began offering academic degrees in general education, criminal justice, and business. These programs are designed to provide students with an Associate of Science degree or



Associate of Arts degree and the ability to transfer classes to a 4 year university as part of the Core Curriculum plus 18 elective hours in the chosen area in order to complete a bachelor's degree. STC is located directly across the street from the university it separated from in 2000, making these degrees a logical choice.

In 2013-14, the state of Texas had 247,293 postsecondary students in career and technical education (Association for Career and Technical Education, 2016). STC's student population in 2015 was 3,613 for credit students and 3,333 non-credit Workforce students. Historically, STC's students have come from many races, ethnicities, and socioeconomic backgrounds. White and African American students account for 49.6% and 33.5% of the student population, respectively. Less than half (44.5%) of students are female and more than half (57.2%) attend part-time. Twenty-one percent of students are first-time-in-college; and of those, over half (64%) received financial aid. STC employs 83 full-time faculty and 71 part-time (adjunct) faculty. Females make up 56.7% of STC's employees, and people of color make up 23.6% of total employees. STC tied for third nationwide in earnings for graduates obtaining an Associate of Applied Science degree (By the Numbers, 2016).

There are many directives for higher education regarding professional development for improved teaching practice. STC is accredited by the Southern Association of Colleges and Schools Commission on Colleges (SACSCOC) and receives Carl Perkins Grant funding for the technical programs. According to Comprehensive Standard 3.7.3, SACSCOC (2012) requires institutions of higher education to have evidence of the professional development of faculty as teachers, scholars, and practitioners, and to establish a "systematic and comprehensive approach to offering and

supporting programs that assist and encourage members of the faculty to pursue professional development” (p.74). In Core Indicator 2P1, the Carl D. Perkins Grant requires institutions to provide “strategies for increasing the number of students earning a credential, certificate or diploma includes academic integration of professional development” (U.S. Department of Education, n.d.), meaning professional development is vital to integrate effective teaching in the classroom, thus increasing the success of students. STC's Mission Statement addresses the need for professional development. Under Quality, the mission states to "create an environment conducive to academic excellences, and growth for all students" and "ensure professional competence of faculty and staff in teaching, creative endeavors, and service."

### **Participants and Settings**

Participants for *Scholar to Scholar*, called participating scholars, were selected on a volunteer basis recommendation to me by their department chair. Department chair recommendations may have been for completion of a Professional Improvement Plan (to improve student course evaluations or faculty evaluations), as part of new faculty and adjunct faculty support, or simply because the chair believes the selected faculty would benefit from the professional development. With professional development not being commonplace on STC's campus, it was important to reinforce to faculty participating in *Scholar to Scholar* that it was not punitive if they chose not to attend or complete the program.

The spring 2017 *Scholar to Scholar* cohort had eleven total participants, representing each of the five departments at STC. Six participants consented to complete participation in the study (Table 3).

Table 3  
*Scholar to Scholar Participants*

Participant	Years of Teaching	Gender
BG	1-3 years	F
CoCo	Less than one year	F
James	4-7	M
Nicki	8-12	F
Rebel	4-7	F
Steve	Less than one year	M

The six participants had varied experiences and goals for participation in *Scholar to Scholar*:

BG is employed by STC as a full-time instructor in the Allied Health Department and has taught for 1-3 years. Her teaching experience beyond college instruction included teaching church classes for many years. She said, “This has helped me be more comfortable with it [teaching] and also different ideas for class involvement.” When asked three specific things she would like to improve to become an excellent instructor, BG said 1) more ideas for presenting, 2) more ideas to get students actively involved in learning, and 3) Alternative teaching styles/methods. BG appeared to have a positive attitude during each of the sessions, asking questions and participating in activities.

CoCo is employed by STC as a full-time instructor in the Allied Health Department and has taught full-time 1-3 years. Before being full-time, she served as an adjunct instructor in the same department. Her teaching experience began when she was required in high school to do presentations and to think “out of the box” when preparing these lessons. Also, in her professional life before teaching, she was a practicing dentist, which required her to provide patient education. When asked three specific things she would like to improve to become an excellent instructor, CoCo said 1) teaching techniques, 2) teaching delivery, and 3) more confidence. CoCo appeared to have a

positive attitude and shy disposition. She took notes during all the presentations and appeared interested in learning new things. She did not ask many questions, choosing instead to listen to the discussion around her.

Nicki has the most experience teaching at STC, first as an adjunct and then as a full-time instructor for 8-12 years. In total, she has been with STC for almost 14 years, all in the Business Technologies Department. Nicki learned to teach with a previous employer and also through her experience with a non-profit organization. She was included on the organization's Nationwide Leadership Training Team. When asked three specific things she would like to improve to become an excellent instructor, Nicki said, 1.) to be able to improve/change each online class every semester, 2.) have more activities in learning to accompany the lecture, and 3.) allow students creativity in learning. Nicki appeared to have a neutral attitude, sometimes engaging in conversation with others and sometimes staying to herself. Her attitude could be perceived as negative by someone who does not know her. During most sessions, she ate lunch while listening to the presenters. Nicki was the 'devil's advocate' with presenters, sometimes sharing how the information would not work in her classroom.

Rebel has been with STC full-time for 4-7 years in the Public Service and Safety Department. One semester before teaching at STC, she began teaching as an adjunct at a community college in Houston. She learned to teach by her experience as a trainer in the Texas prison system. She added, "As an administrator, having to speak and present helped me a lot." When asked three specific things she would like to improve to become an excellent instructor, Rebel said, 1.) incorporate more PowerPoints into face to face teaching, 2.) to have more understanding with the current generation, and 3.) to be more

involved with activities. Rebel exhibited a neutral attitude, but with a strong “personality plus” presence. She was the class clown of the group, often making jokes and other humorous interjections.

Steve was the newest employee at STC, having taught only one semester with the Technology Department when starting *Scholar to Scholar*. Steve has previous experience as a presenter in his former position. He pride himself as a subject matter expert and expressed that he has much to learn about teaching. When asked three specific things he would like to improve to become an excellent instructor, Steve said, 1) organization skills, 2) lesson planning, and 3) administrative skills. Steve appeared to have a positive attitude towards learning, but seemed, at times, overwhelmed with the information. His frame of reference is limited, having less teaching experience than other participants, which may have intimidated him.

James was unable to attend the group orientation meeting where the pre-questionnaire was completed. A one-on-one session was conducted afterward with him to review the orientation materials and discuss his participation. James had been at STC for 1-3 years as an Assistant Director of an area in the Public Service and Safety Department. He did not have prior experience in teaching. James said he would like to work on building his confidence as a teacher. James appeared to have a positive attitude during *Scholar to Scholar*. He asked questions, discussed his thoughts with the other participants, and appeared to enjoy learning the new information.

While the original intent of this researcher was to be a passive observer, it became more as Merriam and Tisdell (2016, p. 144) termed an “Observer as participant.” As this kind of observer, all participants knew the activities of the observer with her participation

being secondary to the role of information gatherer. This participation made it possible for the researcher to interact with the group on a consistent basis but still not be an active participant in the activities being observed.

Participants attended five 2-day sessions of the *Scholar to Scholar* program during the spring 2017 semester (See Appendix A.) *Scholar to Scholar* sessions were presented by faculty scholars (peers) to their fellow faculty. Sessions were conducted in a large lecture room. Tables were placed in a U position allowing members to observe each other and the speaker. There were no extra seats in the U to encourage engagement among faculty members, and the room was large enough to provide semi-privacy for working in small groups during the sessions, if needed.

### **Consent and Confidentiality**

The six study participants of *Scholar to Scholar* were asked to sign a consent form allowing the researcher to use data from the interview and the archival program data (See Appendix B).

Confidentiality of participants in this study was of utmost importance. The real names of participants were not used in the study to ensure this confidentiality and participants chose a name to represent himself or herself in this study. Participants are identified at the department level instead of the program level to also aid in confidentiality. Specific information including questionnaires, field notes, group and individual interview recordings, and raw transcripts were scanned and saved to a flash drive used only for dissertation purpose and secured in a locked filing cabinet in the researcher's locked office. The course observation forms (Appendix C), completed by the researcher, have been shared with each participant's chair as this form counts for the

faculty member's annual observation. Additional field notes written during the observation were not shared with the chair.

### **Scholar to Scholar**

*Scholar to Scholar* is a professional development program developed by the researcher two years ago, to address the need for faculty development at the STC. The development of *Scholar to Scholar* follows the research of Boyer (1990), Richlin (2001), and Richlin and Cox (2004), discussed in Chapter Two.

Presenting scholars are conducting the functions Boyer (1990, p. 68) describes as Discovery, Integration, Application, and Teaching. During the preparation for the seminars, the presenters and researcher met as a group to discuss their research areas of education, and to create a seminar to reflect the research, which Boyer calls Discovery. Integration occurred as the presenters then created seminars by using their experiences and the experiences of others to create content. Next, the presenters provided the seminars to the participants, which fills Boyer's function of Application by bridging the gaps between the research and others, helping the participants to understand how to use the research in their classrooms. By teaching participants how to put the information into practice, Boyer's final function, Teaching, manifested. As Boyer stated (1990), "The work of the professor [presenter] becomes consequential only as it is understood by others." (p.74) The design of *Scholar to Scholar* allowed the presenters to also learn from the participants through the seminar discussions and feedback. Session information varied by the presenter, with each being encouraged to present from his or her research areas (See Appendix A).

One goal of the *Scholar to Scholar* was participants to begin to engage in Scholarly Teaching, as explained in Chapter two. Their scholarly teaching could then move towards the Scholarship of Teaching and Learning (SoTL) by following the phases provided by Richlin and Cox (2004):

Phase 1: Teachers grow in knowledge and insight of their teaching and how the students in their classroom learn.

Phase 2: Faculty, aware of themselves and how their classrooms work, begin talking with others about teaching and learning.

Phase 3: Scholars work in faculty learning committees to work on projects and present information.

For example, two of the presenters (LAC and SH) attended *Scholar to Scholar* the first year it was offered in spring 2016. From their attendance, they followed each of the phases to reach Phase 3, with their presentations in the Spring 2017 *Scholar to Scholar* program, thereby engaging in the Scholarship of Teaching and Learning.

### **Data Collection**

**Archival data.** Some data for this study were collected through archival documents from the *Scholar to Scholar* program. These include initial teacher (classroom) observations, pre-*Scholar to Scholar* questionnaires, and post-*Scholar to Scholar* questionnaires. These documents are part of the program and were not created especially for this study.

**Classroom Observations.** Classroom observations were conducted as part of *Scholar to Scholar* during January and February 2017, before the start of the professional development sessions. These observations were completed using STC's standard form



for classroom observations (Appendix C). All STC full-time faculty are required to be observed by their supervisor annually to assist in the completion of the Faculty Evaluation. Annual observations were complete by the researcher for all faculty participating in *Scholar to Scholar*. The initial observation was to get an idea of how participants approach teaching their courses: Do they do group activities? Do they break from the lecture format? Do faculty try to engage students in their courses? Do faculty appear comfortable with content? Do faculty adjust the content of the course based on student in-class feedback?

**Session Observations.** The researcher also conducted observations of participants during the *Scholar to Scholar* sessions. Carspecken (1996) recommended engagement with participants to the point where the subjects will become accustomed to the researcher's presence and are less likely to alter their behavior because of his/her presence. The frequency of the researcher's presence in the sessions hopefully reduced the effects of an observer in the classroom.

Session observations allowed the researcher to see and hear what the faculty were being instructed firsthand. The researcher made observations, interpreted these observations with knowledge and expertise, and provided specific incidents and behaviors to use as reference points during interviews (Merriam & Tisdell, 2016, p.139).

**Thick notes.** Thick notes were created to aid objectivity during analysis. As an observer of the classroom and *Scholar to Scholar*, the researcher followed Carspecken's (1996, p.47) components and qualities of thick description to include context information, diagrams of seating and changes in seating, and nonverbal communication including posture and movement.

**Questionnaires.** During the orientation session of *Scholar to Scholar*, participants completed a brief questionnaire (See Appendix D). Questions two and three are to acknowledge adjunct teaching as part of the participant's professional experience and also yield the total amount of college teaching experience. Questions four and five were created to acknowledge faculty's experiences, negative and positive, with professional development. The researcher also wanted to see what each person considered to be a 'best' experience compared to the least favorite or 'worst' experience in professional development. Question six asked faculty to think about how they learned to teach. Were they professionally trained in some aspect? Were they simply "dropped" into teaching? Are there experiences other departments provide for faculty that the rest of the school does not provide? Also, the researcher wanted participants to consider other places where they may have been considered teachers or facilitators, whether in an official capacity or not (i.e., Sunday School, Girl Scouts, Book Clubs). Question seven allows the participant to provide three specific positive comments about himself or herself as a teacher. As stated previously, some faculty may think professional development is punitive, especially when asked by their chair to participate. It is important for participants to understand that though they may already be good teachers, there is often still room for improvement. Question eight gauged the participant's awareness of any needs he or she may have with the process of transforming from a good instructor to an excellent instructor. All information provided was kept confidential.

Following the last instructional session of *Scholar to Scholar* held in April 2017, participants were given a post-questionnaire developed from comments recorded in my field notes (See Appendix E). Question one asked participants to identify what the

specific faculty member found most helpful. This information helped the researcher develop the Interview Protocol for one-on-one interviews. Question two was designed after hearing participants talk about small changes made in their classes, things they have become aware of about themselves and how they have used the information in their teaching since the sessions started. Question three was designed to encourage participants to think about and focus on the goal of *Scholar to Scholar* which is to implement pieces of the information and skills learned to improve the specific course selected at the beginning of the process.

**Interviews.** Data were collected through one-on-one interviews with participating scholars. Interviewing is essentially a conversation, encompassing “the art of asking questions and listening” (Denzin & Lincoln, 2008, p. 47). While it is important to remain as neutral as possible, interviews are not neutral because the players in the interview situation create their reality (Denzin & Lincoln, 2008).

One-on-one interviews were conducted during August, allowing time for participants to work on their “project” course for fall implementation. By waiting until the fall semester, participants had time to decompress from the spring semester, review and process the information from *Scholar to Scholar*, and begin work on putting together the course for fall.

For the one-on-one interviews, the researcher closely followed Carspecken’s (1996, pp. 157-158) Interview Protocol: Two to five topic domains, one lead-off question for each domain, a list of covert categories for each domain, and a set of possible follow-up questions for each domain (See Appendix F). The interviews took between 15 and 55

minutes to complete. All interviews took place on STC's campus in a private and quiet location. Interviews were audio-recorded.

### **Data Analysis Procedures**

**Transcription.** The researcher transcribed all recorded data. While time-consuming, transcribing the audio recordings myself allowed me to become more familiar with the data and allowed for analytic comments through the process (Merriam & Tisdell, 2016, p.132).

**Coding.** Transcribed interviews and program questionnaires were coded for themes. Saldana (2013, p.3) provides the following definition of a code: "A code in qualitative inquiry is more often a word or short phrase that symbolically assigns a summative, salient, essence-capturing, and/or evocative attribute for a portion of language-based or visual data." Carspecken (1996) divides coding into two categories: Low-level and high-level coding. Low-level coding requires little analyzing and focuses mainly on objective features. High-level coding is more abstract. High-level coding is "generally based on explicit meaning reconstructions and horizon analysis (Carspecken, 1996, p.148).

The researcher received help coding interviews from a second coder educated in qualitative methods and experienced in coding. The second coder served to help validate my coding. Although familiar with all the participants of *Scholar to Scholar*, the second coder was not aware of the identities of interviewees. Coding consisted of a line by line analysis. After the second coder completed coding, the coded transcripts were returned, and a side-by-side comparison of themes created an overall code.

All interviews were typed and coded using MAXQDA, a qualitative analytical software program. This program allows for the creation of line-numbered transcripts, a variety of coding tools including color-coding, clustering, and the ability to create levels of coding. Results were charted as shown in Table 4.

Table 4  
*Coding System for Interviews*

Code System	B.G. ...	REBE...	STEV...	NICKI...	JAME...	COC...	SUM
▼ Scholar to Scholar		1					1
kudos	2	2	2		1	1	8
S2S Recommendations	2		1	1	4		8
S2S Changes to course	2	2		2	1	9	16
S2S Intentions for use	3	3		2	3	5	16
S2S Specific session feedback	6	4	2	4	3	4	23
S2S Resources	2	1	1	1	3	2	10
▼ Professional development		1	1	2	1	1	6
Professional Development – Previous Employer:		5	1			1	7
Professional development –Teaching	2			1			3
Professional Development – Trade/Content Area	2					2	4
Professional Development – Self Motivation	2	2					4
Professional Development– current employer	3	2	1		1		7
▼ Teaching							0
Classroom Activity		1	5	3	3	4	16
Class routine		8	3	6	3	1	21
Self Imposed Limitations				3			3
Want versus current	4		3	4	3	2	16
Teaching– desires for class	3	2	1		2		8
Teaching– Satisfaction	2	2	1	1	4	1	11
Pre Scholar to Scholar Classroom	3	1	4	1	1		10
Teacher responsibilities		13	3		2		18
Teaching Challenges	2	4	1	2	2	2	13
▼ Students							0
Student Responsibility		7	1	1	5	1	15
Student feedback	4	3	3	1			11
Student Behavior	2	5	1			1	9
Σ SUM	46	69	35	35	42	37	264

## Validity and Reliability

Merriam & Tisdell (2016) provided several strategies for promoting validity and reliability in qualitative research. Of these methods, the researcher implemented the following:

1. Triangulation: Having a variety of data sources, including questionnaires, individual interviews, and observations, the researcher was able to cross-check data

collected at different times throughout *Scholar to Scholar* and the months leading up to the fall 2017 semester.

2. Adequate engagement in data collection: As the creator and facilitator of the *Scholar to Scholar* program as well as spending countless hours engaged with the participants of *Scholar to Scholar*, the researcher reached “saturation” in the data.

3. Researcher’s position or reflexivity: As a researcher, a conscious effort was made to remain as unbiased as possible. The researcher has acknowledged any known bias, assumptions, and relationship with the study.

4. Peer review/examination: The researcher discussed this research with peers and dissertation committee.

5. After coding transcriptions, a peer served as an additional coder of the interview transcripts, to validate the findings. Participant’s real names were not provided with the transcripts.

With qualitative research, the goal is not to prove generalizability of the findings but rather to be consistent with a detailed thick, rich, description of events. Replication of a qualitative study may not yield the same results, but someone with the same data coming to the same conclusion may determine dependability (Merriam & Tisdell, 2016).

**Limitations.** Two weeks after interviewing the *Scholar to Scholar* participants, the researcher ended her employment at STC. Member checks, a method of triangulation, could not be conducted after losing access to the participants. Still, the researcher was able to do consistency checks (Carspecken, 1996, p. 166) by checking the consistency among interviews, questionnaires, and research notes.

**Summary**

Chapter III provided information about the participants and setting, methodology, data collection and data analysis procedures. Limitations to the methodology were also discussed. Chapter IV will present the findings from the research.

## Chapter IV

### Findings

The purpose of this study was to investigate participant's intention to use information obtained in the *Scholar to Scholar* professional development program to improve their scholarly teaching strategies for future semesters. Six faculty who attended *Scholar to Scholar* in spring 2017 participated in this study. The following research question guided this study:

RQ: What are the interpretations of technical faculty regarding the Scholar to Scholar professional development program's impact on their intended instructional strategies?

This chapter contains the findings of the data collected via pre and post questionnaires, observations in the classroom and *Scholar to Scholar* sessions, and interviews with the six participants. During the process of qualitative inquiry, themes outside the original research question developed. These findings are presented in this chapter as contributing factors.

### Intentions to Use *Scholar to Scholar*

**Specific session feedback.** *Scholar to Scholar* provided a unique experience for each participant. During the interview sessions, I asked each participant to tell me which session of *Scholar to Scholar* they liked the most and why. Session titles were as follows (See Appendix A for specific presentation information):

Session One:	Teacher and Student Perceptions
Session Two:	Designing Materials to Engage the Classroom
Session Three:	Faculty Engagement & Retaining Students in the Classroom [session cancelled, presenter illness]



Session Four:           Developing Relationships Through Effective  
Communications- Teaching like a Salesperson

Session Five:           Facilitating the Classroom

Session Six:           Instructional Design: Putting it All Together

***Session one.*** This session focused on student and teacher perceptions of each other and how that impacts the classroom culture. Coco preferred this session. She said she was able to think about how she is be perceived by her students and make some immediate changes.

***Session two.*** This session focused on the use of Web 2.0 tool use in the classroom. For the participants, the use of Web 2.0 tools was a new concept. Faculty most cited this as their favorite session. Regarding Session Two, Rebel said, “I loved it. It just blew me away! Not knowing the things you can do with all those tools.” BG said her favorite session was Session Two because it gave her specific tools she could begin using right away. She implemented some of the Web 2.0 tools during the spring semester. Nicki was impressed with the presenter’s webpage, with her resume and links to other information.

***Session three.*** Cancelled.

***Session four.*** This session focused on communication and teaching like a salesperson. Rebel enjoyed sessions four saying it “was awesome” because if focused on communication which she considers to be important in any relationship, personal, public, or private. James said he most enjoyed this session, with the practices and exercises. James said:

My issue has always been I have the knowledge, but I don't know how to convey or to communicate the knowledge to my students. This one was really good for me because it showed me some things I can do to relate to them.

**Session five.** Session Five focused on facilitating the classroom, a term the presenter chose to use instead of flipping the classroom. Nicki wants to eventually work in a facilitated classroom so students can “have more hands-on experiences rather than just lecturing to them.” Steve states this session was his favorite. He enjoyed how the presenter described her own experience and presented the statistics from her classes, and how she described the problems she had and how she handled those problems. When asked, Steve said he doesn't know how he might implement it because “It's all kind of a blur.”

**Session six.** This session served as the wrap-it-all-up session by focusing on objectives of the course and instructional design. For Rebel, this session, “Putting it All Together” did just that for Rebel. She stated, “With using Blackboard so much, Instructional design was a part of that. We don't hear about that with the face-to-face classes.”

The variety of sessions offered concrete and more abstract topics. BG, Rebel, CoCo, Steve, and James preferred the combination of concrete and abstract. Nicki preferred the concrete topics and stated:

I feel like the discussion for the abstract things went way off topic. The blackboard and flipped classroom one really stayed on topic and focused. Whereas the more abstract ones went in a myriad of directions and then lost my attention.

**Intentions at the end of Scholar to Scholar.** During the final session of *Scholar to Scholar*, I met with all the participants for a debriefing session to talk about their experiences in the program and for them to fill out the Post *Scholar to Scholar* Questionnaire (See Appendix C). In the session before this one, the researcher observed James and a couple of the General Education faculty talking about some changes already implemented in the current semester's courses. Since one of the goals of *Scholar to Scholar* is to prepare material for the following semester, the researcher was excited to learn that some were already making small changes to their courses. Question two asked, "What changes, if any, have you made in your teaching strategies since the start of *Scholar to Scholar*?" CoCo wrote, "I made use of the websites that were mentioned in session two. It made the students participate more, and they were excited and paid more attention to the topic. It also made the information given to them stick." The two websites were two free Web 2.0 tools. BG also incorporated Web 2.0 tools and reported they were a big success in the classroom. She credited *Scholar to Scholar* for giving her "concrete information as well as motivation and fresh ideas to incorporate as an educator. All this will translate to student success!" Steve wrote that one change he made was to be open to new teaching methods and to make sure to "develop content that today's student can relate to." James was not specific about what he had changed, just that he was using the exercises in his instruction. Rebel and Nicki reported not making any changes, with Nicki adding she was "currently treading water."

Question three on the post-questionnaire asked the question, "How will you use the information/skills from *Scholar to Scholar* to improve your course for fall?" At this

point, the answers took into account an up-coming four-month preparation time before the fall semester started. BG wrote:

I am going to review each session and choose at least one (or more) of the skills or ideas presented and incorporate them into my course. I foresee BIG improvements in student involvement → which will increase student success! I am excited and have really felt education and empowered by the sessions! Thank You! CoCo also appeared to be enthusiastic at the end of *Scholar to Scholar*, and wrote:

1) I will focus more on what I can do to help students retain more information than what will be convenient for me, 2) Change[-ing] the perception and being consciously competent can improve my course, and 3) Creating a mission statement, in the beginning, can help me focus on what I should do [to] achieve what I am supposed to do.

James related his use of skills and information to an increase in confidence in the classroom. He wrote, “My concern was how I conveyed my knowledge to students. I now have a strong foundation to build on. I can build on instructional design and make it fit my model of teaching.” Rebel wrote that she planned to use the Web 2.0 tools and help create the buy-in with her students. Nicki and Steve wrote they planned to look at their current course and make changes to the current course content, but did not write any specific plans for use.

**Implemented changes during spring and summer.** Almost four months later, and three weeks before the start of the fall semester, the researcher again asked faculty, during the individual interviews, what their intentions were in making changes to their class based on what they learned in *Scholar to Scholar*.

Three interviewees shared some changes that were completed in summer school and an early start program for fall. Through CoCo's tone of voice and facial expressions during this part of the interview, her excitement at having tried new strategies from each session was obvious. CoCo recounted her summer experience by telling how she changed her perception and approach towards students based on something I said to the participants. During the "Teacher and Student Perception" session of *Scholar to Scholar*, I said, "As teachers, we have to remember that just because we've taught our courses hundreds of times, that doesn't mean students have heard it hundreds of times" meaning that we have to remember our students are not content experts, yet.

Coco stated:

Because of that, it opened my mind to like, especially for those who do not have dental experience, that you need to take it slow because they really don't understand what they [teachers] are saying. It's like waa waa waa [in a Charlie Brown teacher voice]. Changing my perception with the student really helped. And I think changing their perceptions about me because after I changed that, they are not scared of me anymore.

Coco talked about incorporating activities from "Developing Relationships Through Effective Communications- Teaching Like a Salesperson":

For building relationships effective communication also, I started my semester with the Mission Statement for each student. I told them to put it in their locker, the door of your locker, and then whenever you feel like you are not really, you are losing hope or losing faith in yourself, you read your Mission Statement.

From the “Designing Materials to Engage the Classroom” session, CoCo shared how she used the knowledge about Web 2.0 tools to find materials to better engage the students to find a specific App that shows the teeth:

If you point to one tooth, it’s interactive, so you can see all the angles, and then describing the tooth for which one is left, which one is right, then there are descriptions. And that it is the tooth. It also has a quiz that really helps. Instead of bringing specimens home, they can use the app!

CoCo said she practiced facilitating the classroom, letting students lecture the class instead of her while using the mannequins in class. From the “Putting it All Together” session, she stated she, “took one of my objectives and then from there I broke it down so that I know I am following the objectives of my class.” She concluded by stating, “So I basically put everything together!”

BG began using the Web 2.0 tools and incorporated one, taking into account, as she said, the statement from *Scholar to Scholar* about starting small and not trying to change everything all at one time. BG looked through the Web 2.0 tools and chose to try Mentimeter:

I didn’t use it in every session, but I did use it several times, and it was very successful. They loved those sections when we could break it [the class] up. I could have a little discussion and then may go to Mentimeter for a question; I didn’t necessarily do it all at once. And one of the functions on there it makes it like a competition, and they put in like a fake name or whatever at the end, and then it has winners at the end. They loved that!

Steve was excited to share a story about a game he incorporated into his summer class.

Steve said he used Excel to create the game that looks like the game “Candy Land.” He went on to explain the game:

I put it (the spreadsheet) on the overhead. Then I had questions that were one point, three points, or five points, depending upon the level, a five-pointer was a lot harder than a three-pointer. Four people were on a team, and they had, had to, they could not skip a question. It was not a group effort; it was not. It was this one, then this one, then this one. The first person to get all the way around, their shift wins.

Steve went on to share that after a sudden death round, one of the people on the winning shift won a \$10 gift card. Steve, who is usually a person with limited changes in facial or vocal expression, became excited as he continued talking about the game. He added:

It was cool. You know it was really cool you know, because some of the ones that were quiet through the year, you know, they would go “oh, I know that. I know that one. Why didn’t you ask me that one?” It was a really good final exam. So I AM going to incorporate that, so that’s just a little thing to do at the end of the semester.

**Intentions for future semesters.** In regards to the fall semester, CoCo planned to continue the changes she has made, lecture less, and “from there, see what I can come up with.”

BG will be teaching the same set of students in the fall as she taught this past spring. She planned on using different Web 2.0 tools so she will not be doing the same

thing with those students. She hopes since she used them in the spring semester, students will already be familiar with her use of Web 2.0 tools.

At the time of the interview, James had recently started the fall semester. The program he teaches started three weeks before the rest of the campus. James said he looked forward to doing things that will be beneficial to his students. In regards to “Facilitating the Classroom” James says, in spite of the “paramilitary” rank structure or chain of command:

I’m also sort of trying to be more democratic and allowing them to have a little bit more. I’m a little bit more lenient on how we go about the classroom. I want to put a lot more emphasis on the squad leaders and class leaders [these are students], and let them manage a little bit more. I’m eager. It’s going to be something this semester.

James continued:

And instead of me teach, or instead of one my adjuncts teaching, maybe get a group of three or four people together and then they get a 10 or 15-minute presentation together. Let them teach something and use the strategy that she [the presenter] showed me in class. I also want to get rid of too much PowerPoint and bring in more practical exercises.

Rebel shared her plans for the upcoming fall semester. Through observation of Rebel’s class during the spring semester and prior class observations, I have seen her use many strategies to engage students already. Rebel stated:



I did not change anything last spring because I was preparing my Scholar to Scholar experience to prepare me for fall. So this semester, it's gonna be...you know, a lot of changes from what I learned in *Scholar to Scholar*.

I asked Rebel to tell me specifically what kinds of changes she will make. Rebel brought up information learned in the "Designing Materials to Engage the Classroom." She stated:

Even though I try to engage them, I think that Poll Everywhere and all the different things it can do, and pop-ups their answers, and I think the students will engage even more. Even though you know you can't sit in my classroom and not engage, cause I'm going to call you out. Everybody! It can be a classroom of 27, or it can be a classroom of 10. Everybody in here, [their]name is going to be called.

Nicki did not make any changes before fall because she "wanted to have a chance to work on it over the summer and see what I could incorporate." As for fall, Nicki stated:

I AM going to figure out a way to better facilitate rather than lecture that supply and demand concept. I don't know how yet, but that is what I'm honing in on. "I'd kinda like to lecture less and facilitate more. And let them be a little more hands-on, without it, making it seem like busy work."

She said she wants to work toward having a "flipped" classroom, or on becoming more of a facilitator in the classroom, letting her students have more "hands-on experience with economics, rather than being lectured to."

**Self-imposed limitations.** While discussing the use of information from the *Scholar to Scholar* program, a disconnect between the information provided in the

sessions and two instructors' self-perceived ability to manage and direct their classroom emerged. Nicki appeared to have difficulty understanding her role in creating change in the classroom even after participating in the professional development program. Nicki stated, "One of the things that is preventing me [from facilitating the classroom] is, in my face to face classrooms is I don't have access to computers in my current classroom."

She further stated:

I guess my greatest challenge is the engagement or, or, trying to pull it out of them. You know, I feel like they are typical students. You know they want to just come to class, and several of them are frantically taking notes, and the rest of them are falling asleep! So I wish I could figure out some way to engage them more.

Steve stated his challenge to be "I still have students nod off. I still see them not paying attention; I still see them not engaged. I just wish there was some passion for what they are going into." When asked what he does as an instructor when that happens, Steve said,

To be honest with you, I pretty much ignore it a lot. I don't know how to approach it. Go over and yell at them? Or I look at it like also, they are young adults, they are paying for this. I had a history teacher in college say I am going to come here every day and lecture. I don't care if there is no one in this class, I'm going to come here every day, you know and teach this lesson. It's my job to do that. It's y'all's job to pick it up. There's some of that. I don't know how I feel about that really.

I reminded Steve of the game he shared with me earlier when he spoke of summer school. I asked him if any of the students fell asleep the day he did the review. He said that all the students participated, even the students who usually did not. When I asked him if he got the correlation, he said, “They were engaged?!” This realization appeared to be an “aha” moment for Steve, understanding that he had created the environment that engaged students. After teaching a year, he said his greatest wish is for students to learn:

I want to take this technical stuff and get it, try to simplify my message to these kids where that can understand it. They’ve never seen what’s out there. They have only seen pictures out there, or read about it, or heard about it. Just to, I want them to learn more. I don’t want them to learn how to take a test and pass it; I want them to retain it and apply it. You know, learn what’s important.

**Use of *Scholar to Scholar* resources.** As part of the intention to make changes to their classroom, it is important to not only look at participant’s follow-through with sessions but also their intention to use the resources provided. Participating scholars were provided with several articles and tools for their use in preparing for future semesters (Appendix A). Information was provided to participants during the Orientation for *Scholar to Scholar* as a binder and three books. Participants indicated that they used the information to varying degrees but did not specify anything being used. *Teaching Unprepared Students* by Kathleen F. Gabriel, was the most frequently commented on material. BG, James, and CoCo reported that they had read the book. “I finished that one,” BG states, “I liked that one a lot. Yeah, I don’t know if I put any of it into use, but it’s got me thinking at least for sure. I thought it was good, definitely good reading.” She added that her *Scholar to Scholar* binder, “like my Bible now. And so I’m excited to

gradually implement all of it.” James said, “The Unprepared [Student] because I think that’s what I’m getting [unprepared students]. Sometimes I don’t get the best and brightest, or I don’t get people who understand how to take the tests that we build, and that they have to take.” CoCo said she has read through some articles in addition to reading the book, and specifically liked the “Breaking the Ice” part of the binder. BG and James cited a lack of available time as the reason for not implementing specific tools or exercises into their class.

Steve said that he had not reviewed any information in preparation for the fall semester, saying he hasn’t taken time or “done much with school period.” Nicki had skimmed through the books but had not read any of them or the articles, stating:

Honestly all of those articles, no. I probably won’t read all the articles. I kind of skimmed through them [the books], I feel like um, that they have some really good points that I could maybe tweak just a little bit for my classes.

Rebel has flipped through the *Scholar to Scholar* information and binder but did not report using any of the information in class preparation.

### **Contributing Themes**

**Professional Development at STC.** Participants in *Scholar to Scholar* all said they had received no professional development about teaching before, or since, becoming an instructor at STC. James and Rebel had received one on one instruction through the Distance Education office in the use of the learning management system, Blackboard. Rebel, who was hired to be an online-only instructor, spent several weeks before her first semester started, learning how to navigate through Blackboard and build her courses. All the participants have attended All College Day, a day of professional development at

STC, but had not received any instruction regarding teaching strategies, classroom management, or technology beyond the use of Blackboard. Topics mentioned from All College Day include advising, use of Excel, and how to market programs. James, CoCo, and BG all said they had attended content related conferences or seminars, paid for by STC, but none related to teaching.

Two participants shared being self-motivated to find professional development. BG said she did “some online self-educator courses” online to learn teaching strategies. Rebel also said that she attends as many webinars as she can fit into her schedule.

**Professional development upon the start of teaching.** Having mentors or others to learn from when starting in the teaching profession was not the reality for these six faculty. Nicki shared her story:

I remember my first semester on campus. I was an adjunct, so I started with a couple of classes, then I became a full-time adjunct in the middle of the semester. So I was thrown into five or six classes halfway through the semester. I really felt like I was thrown to the wolves. Like really, I had no idea what I was doing. It was like, here are all your books and here’s where your classes are, and that was about the extent of my training.

Similarly, Steve said, “I got the textbooks, and I got the homework, and I got the tests that had already been done by other people. So I just went through it and some things I kept and some things I changed.” Coco recalled being an adjunct instructor and following the main instructor and how she did things. An example she provided was that the main instructor used mostly PowerPoint, and now she does too.

**Current Engagement Practices.** Faculty described various ways engagement takes place in their classes. Some faculty do purposeful engagement by how they start the class or by the nature of the material taught. Others have minimal engagement throughout the entire class. Information about current engagement practices was gathered through classroom observations (See Table 5) by the researcher, and self-reported practices during the interview session.

Table 5  
*Classroom Observations*

Participant Name/ Date of Observation	Strongest Areas Observed	Weakest Areas Observed
BG 02/07/17	<ul style="list-style-type: none"> <li>Used questions to check for understanding</li> <li>Positive interactions when providing feedback</li> <li>Related to students with personal experience</li> <li>Encouraged students to research to find answers to questions</li> </ul>	<ul style="list-style-type: none"> <li>Students talking to each other while teacher talking</li> <li>Involved students only when hands were raised</li> </ul>
CoCo 01/30/17	<ul style="list-style-type: none"> <li>Excellent listener</li> <li>Used students' names</li> <li>Friendly, welcoming</li> </ul>	<ul style="list-style-type: none"> <li>Need to repeat students answers, so everyone hears</li> <li>Stood still at the podium</li> </ul>
James 02/07/17	<ul style="list-style-type: none"> <li>Patient and friendly</li> <li>Uses student names</li> <li>Step by step process</li> </ul>	<ul style="list-style-type: none"> <li>Serious nature of the course may not allow for causal rapport building, Not an instructor issue.</li> </ul>
Nicki 02/06/17	<ul style="list-style-type: none"> <li>Invited discussion at the beginning of class.</li> <li>Good stories to help visualization</li> </ul>	<ul style="list-style-type: none"> <li>Did not have any non-lecture activity</li> <li>Did not use student's name</li> <li>Students did not participate in discussion</li> </ul>
Rebel 02/03/17	<ul style="list-style-type: none"> <li>Good rapport with students, humor, welcoming</li> <li>Requires class discussion</li> <li>Students appeared comfortable answering questions in class.</li> <li>Uses students' names</li> </ul>	<ul style="list-style-type: none"> <li>Did not use any visuals in class.</li> </ul>
Steve 02/08/17	<ul style="list-style-type: none"> <li>Knowledge, ability to relate information to students' future work</li> <li>Drawings on the board</li> <li>Responsive to questions, comments</li> </ul>	<ul style="list-style-type: none"> <li>No activity for students</li> <li>Put book on overhead and read it</li> <li>Classroom management issues- students not listening, on phones, talking, etc</li> </ul>

Rebel, who said she lectures about 60% of the time, started her class the same way each day. Students are greeted as they enter the room and small talk ensues. Small talk may be about what's going on in the world, pop culture, and "stuff that I know interests them." The class period continues with discussion back and forth between Rebel and the students. As I observed in the classroom, Rebel frequently engages the student and involves them with the course content. Rebel described how she ends each class:

I always end my class, every class, with 'thank you for your time, participation, and cooperation' and it's caught on, so if I don't say it, students literally just sit there [do not leave at the end of class]. Any questions after that, they can come up and see me or make an appointment.

Steve had pride in his 24 years of work experience in the field he now teaches. He used drawings on the board and brought in visual aids such as real pieces of the machinery or parts being discussed. Steve stated he lectures 100% of the class period. During my classroom observation of Steve, there was very little personal engagement with the students. He taught directly from the textbook and at one point, put the textbook on the Elmo (overhead) and read directly from it to students. When class time was over, he stopped and said he would see them next class.

There is a lab course required that corresponds to the lecture section of Steve's course. Steve stated he only lectures about 10% of the time in the lab, the rest of the time students spend working on computer-generated exercises. Steve said the lab work does not match the classroom work.

Nicki lectures about 90% of the time, using the remaining time for discussion and classroom routines. She greets students once class begins and said she sometimes uses

informal conversation for talking about how hot the room is or about the weather. By the end of class, she said the students start opening up and begin talking with her. She conducted a recap of what she covered and how it relates to previous topics. Her online course is organized into units. For instance, the students read chapter one and take a quiz over chapter one. Sometimes, she incorporates videos into the face-to-face and online courses. While she does discussion boards with the online courses, she does not engage in the discussion boards with students. She said, “I really just facilitate it.”

By the nature of James’ program, engagement with students is required. The level of possible engagement depends on the topic and lecture is about 80% of the class. The day the researcher observed the class, PowerPoint was being used to review the steps of cleaning a gun. Then, James walked students through the process while they did the skill. The state commission over his program provides the material and exercises that must be completed. James states, “They are very strict on how we teach. They want it done a certain way. We can always add to it, but we can never subtract from it.” His students are in class from 8:00 am – 5:00 pm daily for 18 weeks.

According to BG, she lectured 85% of the time. In a typical class, she greets the students and then lectures with PowerPoint, because this is what was handed to her when she started teaching. BG states,

So, even though I start with PowerPoints, I always did try to get student involvement and try to keep it, um, to keep their attention, not just reading it. I try to never read. That was kind of the method I went with, so I didn’t forget to cover anything.



CoCo reported lecturing about 80% of the time in the classroom and 30% of the time in the lab she teaches. She has the same students in the class for five hours each week. She greets the students and talks about past lessons, lectures through the next lesson, and takes questions at the end. Students work in groups in both the lecture and lab. As observed during her class, students also participated in presentations for the class about the current subject matter.

**Challenges of teaching.** During the interview process, when asked, all participants were able to share information regarding the challenges in teaching or the classroom. Student attitudes were a prevalent issue that emerged. Steve stated, “I just wish these kids had a passion for it. This is going to be their career.” Rebel echoes Steve’s response, adding, “Maybe the students are not as motivated or dedicated. What are you going to school for? I don’t think you should pick a career and not love it, it’s just not going to work.”

As the researcher listened to the interviews several times, two participants seemed unaware of their role in changing how their classroom runs. Nicki said her greatest challenge is in engagement or “trying to pull it out of them.” Ironically, in the pre-questionnaire, Nicki wrote that “If I have to listen to another guest speaker preach to us about how Millennials learn differently, I will run out of the room screaming!”

CoCo and BG both felt the challenges are within themselves (self-responsibility). CoCo has taught less than one year. Her biggest challenge is not “knowing the lesson real well.” Coco says that she sometimes asks the students to research something when they ask a question she is not prepared to answer. BG wants to “really keep it interesting at the student level” to help ensure the students retain the information and maintain

interest in the lecture. But she expressed concern about trying new things in a course since the exercise could “totally flop,” and then a class period is wasted.

**Satisfaction.** All participants were asked their greatest satisfaction from teaching, with answers varying between student growth, feedback after the semester, and relationships. James said, “They are nervous, sort of unsure of themselves day one and I like to watch how they progress to someone who is confident and feels like they can do the job.” Coco said students making good grades and being able to explain what they have learned is most satisfying. Rebel said creating relationships, and connections with students bring her the most satisfaction. She said, “I’m doing my job well enough that they [students] trust me; That brings me satisfaction.”

### **Recommendations for Future Professional Development**

Each participant offered thoughts on the structure of future “effective” faculty development at STC:

- BG: There are some topics you can talk about generally, but it’s almost like you need some specific faculty development like for maybe some of the programs because you can have totally different groups of students and approaches that you need. I wish I could have had something, like something more specifically like what is some good ways to present this type of information.
- Steve: I think it’s (faculty development) good, but some of the roadblocks I see is my subject. It’s just so (pausing) technical, but it’s a different type of subject. It’s just lectures and visual aids and going out in our little training units we have. It (classwork) has to be very repetitious. A lot of the subject matter is exactly the same.

- CoCo: I think all the topics that we talked about in *Scholar to Scholar* will really help everyone. For example, the All College Day, probably pick one [topic] and then instead of just repeating everything [from this year's *Scholar to Scholar*], just get some brand new topics and teachers will be interested in going. Do from there; they [faculty] will look forward to another All College Day, hopefully, learn something from this College Day.
- Rebel: Show some faculty that's been here for like ever, nothing against them, they bring a lot of knowledge, that the students are different. So you have to learn how to engage with this generation. I could stand up and lecture all day. Some may get it; some may not. But the majority of these students, they wouldn't if there is no engagement, no activity. It (faculty development) benefits us all. People might gripe, blah, blah, blah, but once they get in it, and see what is actually going on and what is being taught, I can't see anyone leaving *Scholar to Scholar* and not have a different perspective on what they are doing. Just because you've been here 40 years, don't mean you don't need to change. And because you've been here one year don't mean you don't...let's say, the more people who come in, they are more tech people. They have more tech, but your older people, they don't like it. I'm not talking about anyone in particular, but it scares them.
- Nicki: I really think that it would be beneficial for new faculty to go through a program such as this (*Scholar to Scholar*). I had decided a long time ago that I was going to be a college professor, so I was going to make it no matter what, but I do think that some of these things we talked about would have been very beneficial to me years ago.

- James: One thing I'd like to see a little bit more...interdepartmental communication. Because of the small conversations in the class, the side conversations, it was good to hear their point of view specifically because they don't have a program like mine. I think that this program you have here, *Scholar to Scholar*, I think if you're truly wanting to teach and help develop people at a collegiate level, this is a good program. I think it should be something those who come in for orientation, not as long of a program, but maybe an abbreviated program would be great for anybody who is wanting to develop students. It helped me. The one thing that it helped me develop specifically is my confidence.

**Participant's Comments and Feedback.** The final interview question asked of all participants was, "Do you have any comments you'd like to make or other suggestions?" This question was asked as an opportunity for any last comments and to provide the researcher with information for improving *Scholar to Scholar* in future semesters.

Participants overall enjoyed the experience and opportunity to participate in *Scholar to Scholar* and to learn new teaching strategies. BG expressed excitement at eventually implementing "all of it!" Steve, the newest faculty of the group, enjoyed meeting other faculty in different departments. He stated:

Getting to hear the other experiences helps a lot. And being open to new ways of doing things. Listening to a lot of you that were in there. Y'all [other participants, presenters] are so open to new, creative ways of teaching and I enjoyed hearing those. Yeah, I'm going to evolve in this thing.

Rebel was involved in numerous professional development programs in her previous employment, both as an attendee and a presenter. Because of her experience, Rebel may have been a skeptic at first. She offered her opinion at the end of *Scholar to Scholar*:

I can't see anyone leaving *Scholar to Scholar* and not have a different perspective on what they are doing. It was really engaging because all of them [the presenters] were engaging. I didn't walk away feeling like this was a waste of my time even though I've [trailed off], I still learned something. I went to *Scholar to Scholar* and learned a lot. Now I can go out and tell other people they should go to *Scholar to Scholar*. You need it.

James and CoCo both offered gratitude and thanks for the opportunity to participate in *Scholar to Scholar*. James stated:

It was a very good class. I was grateful to be a part of it. I enjoyed it. I think anybody who is serious about wanting to teach at this level should at least participate in something similar to what you have here.

CoCo stated:

I just want to thank you for creating the program. It's really helped me. It was the perfect timing for me since I'm starting instead of having those habits I cannot change anymore. So this was really helpful.

## **Summary**

Chapter IV presented the findings of data collected from participants using pre and post-questionnaires, interviews, and observations. Thick notes were collected during the observations to increase the validity of the interviews and questionnaires. Next,

Chapter V provides a discussion of the findings, limitations, and recommendations for future research.

## **Chapter V**

### **Discussion and Recommendations**

The purpose of this study was to investigate participant's intentions to use information obtained in the *Scholar to Scholar* professional development program to improve their scholarly teaching strategies for future semesters.

#### **Discussion of Findings**

*Scholar to Scholar* created an awareness of instructional strategies faculty can use in their classroom. As with any issue, the first step was to have an understanding that a problem exists. *Scholar to Scholar* provided the participants with evidence of the issues and how to work towards improving them.

Faculty participating in *Scholar to Scholar* at STC overwhelmingly intended to make instructional changes in their classrooms. Participants who described on the post program questionnaire how they might incorporate information from *Scholar to Scholar* tended to have a better plan of action when asked about their intentions during the interview session. Although all participants claimed intentions of changing their teaching strategies, not all could explain how they would do so.

After participating in *Scholar to Scholar*, two faculty did not connect the content of *Scholar to Scholar* with their abilities to create change in their classroom. This study found some faculty are proactive in their approach to their classroom experiences, while others are reactionary to the responses or lack of enthusiasm of the students. To change the classroom experience for students, teachers will have to take the first step towards engagement with the students. Teachers need to be empowered to take control of their classroom in setting the atmosphere for learning to take place.

Faculty who used activities outside of lecture before attending *Scholar to Scholar* were more likely to have the intention of changing their instructional strategy. Poorly-rated classroom observations were related to the faculty who had fewer intended changes in the classroom upon completion of *Scholar to Scholar*. Faculty who reported lecturing over 90% of the time in class were not able to provide specific information on how their teaching would change, just that they intended to change parts of it.

All faculty in higher education can benefit from participation in a professional development program aimed at providing participants with information on instructional strategies for the classroom. None of the participants in *Scholar to Scholar* received any professional development related to teaching before attending this program. These faculty were instead expected to know how to teach- something they had not been taught to do before! Being a subject matter expert in work and education does not guarantee effective teaching.

*Scholar to Scholar* participants responded positively to participating in a Learning Community. The faculty participating in *Scholar to Scholar* spent over 18 hours with faculty who taught in different departments. James and Steve, in particular, noted that the interaction amongst participants, and between participants and presenters, helped them build relationships and support systems for the future. Discussion regarding similarities and differences of the students in different programs helped participants to understand others' perspectives. For instance, some programs are highly selective, with a competitive application process, while others are open enrollment. In addition to the intended learning outcomes in *Scholar to Scholar*, the camaraderie of the Learning Community proved to be a benefit of this experience. Regardless of participants'



intentions to use the information from *Scholar to Scholar* to improve their fall courses, participants found the experience of participation in *Scholar to Scholar* beneficial.

Participants provided recommendations for improving both *Scholar to Scholar* and professional development in general. Although the strategies can be generalized to any teaching experience, two participants said having specialized training for teaching in their subject areas (not content, but the process) would be beneficial. One participant specifically pointed out how even older faculty can benefit from a program such as *Scholar to Scholar*, implying that just because they have been teaching a long time, it does not mean they would not benefit from learning about this generation and new ways of teaching. On the other hand, three participants felt *Scholar to Scholar* would be most helpful for new faculty.

### **Contributions to the Literature**

This study contributes to the literature by investigating faculty participating in a professional development program at a Technical College. Research on technical colleges is limited, generalized under Community Colleges, or two-year schools, instead of being researched as an individual type of college with unique experiences.

Another contribution to the literature occurs by providing presenters teaching at a Technical College an opportunity to engage in the Scholarship of Teaching and Learning by bringing their research to other faculty. This study highlights the possibility of programs designed to showcase the research and talents of an institution's faculty in a low-cost, local professional development program.

Finally, this research contributes to the literature by highlighting the lack of professional development provided to faculty teaching at technical colleges. Being a

content-expert in the field is not sufficient if the faculty is unable to share their wisdom with students in a way students learn.

### **Limitations**

During this research, four limitations were noted :

1. Session Design: Presenters received specific direction on creating the format for the *Scholar to Scholar* sessions. Presenters provided the facilitator with an outline for his/her session, which included a specific activity for each participant to be able to create for his/her fall semester class. In reality, not all presented sessions gave the participants a specific (easy to recreate) tool or strategy to implement in their courses.

2. Facilities: *Scholar to Scholar* was held in a fairly new facility on STC's campus, but there were frequent issues with the Internet in the room. Because of this, some information presenters planned to use in the sessions, could not be used, for example, videos and Web 2.0 tools. The lack of Internet also kept participants from being able to create materials during the session time on at least two occasions.

3. Presenter Illness: Session Three, "Faculty Engagement and Retaining Students in the Classroom," had to be canceled. The Presenter became seriously ill and was unable to return for the entirety of the semester. Ideally, another presenter or the facilitator would be able to share the presentation she developed. Participants did not receive the information most aligning to instructional strategies for faculty engagement and retention.

4. The researcher also served as the facilitator for *Scholar to Scholar*. Because of a job change, the researcher was not able to facilitate engagement with the learning community for a complete 12 months as a Faculty Learning Community would suggest.

Further discussion on Scholarly Teaching and encouragement to participate in the Scholarship of Teaching and Learning did not occur.

### **Recommendations for future Scholar to Scholar sessions**

Based on the findings presented in Chapter Four, the following should be considered for future *Scholar to Scholar* programs:

1. Course Release for Participants: Nicki suggested participants receive a course release (teach 12 semester credit hours instead of 15 semester credit hours) during the semester they participate in the *Scholar to Scholar* program. Lack of time to process the information and create changes may have contributed to the lack of implementation for fall courses for participants. A course release would compensate participants for their time spent in the *Scholar to Scholar* sessions and the preparation time to create materials for the future semester.

2. The facilitator should provide ‘tighter’ expectations or quality control with Presenters to better control for session content. Participants did not receive the instruction as the facilitator envisioned it being presented.

3. Presenters could work together on sessions, so the material is covered in the case of illness. The year before this *Scholar to Scholar* program, presenters conducted sessions together, with two people preparing the information. This structure changed after the presenters cited having difficulties finding time to work together.

4. *Scholar to Scholar* sessions were required to focus on scholarly research. Much of this research does not pertain to a technical college education. The facilitator and presenters should make an effort to include examples from technical education.

These examples may help participants in understanding how these concepts can work in their classrooms and that it is not only for academic courses.

### **Recommendations for Future Research**

During this study, there were six areas noted for further research.

First, the research can be expanded to include both technical and academic faculty teaching at a technical school. Although the areas of expertise are different, they are teaching the same students. The academic faculty were not included in this study since they were under the researcher's direct supervision.

The second area for future research is studying the intentions of the faculty at different stages of their career: beginning faculty, mid-career faculty, and late career faculty. In this study, beginning faculty were represented in larger numbers (four) than the early/mid-career faculty (two). Do faculty benefit from learning teaching strategies, such as active learning, at the beginning of their career? Are faculty who have experience teaching better able to see the need for active learning in the classroom?

The third area for future research is a longitudinal study designed to better understand the long-term impact of learned teaching techniques by participants in *Scholar to Scholar*. This type of study allows the researcher to move deeper into follow through with the participants. For example, instead of studying the intentions of faculty, the researcher could investigate actual classroom implementation and resulting data. This longitudinal research could answer the questions of faculty engagement in scholarly teaching, and eventual participation in the Scholarship of Teaching and Learning.

The fourth area for future research would be to explore which teaching strategies are most effective as perceived by the students and the impact on student retention.

The fifth area for future research is the exploration of why some faculty follow through with changing their classrooms, while others do not. In this study, the two faculty who lectured the most (self-report and observation) were also the two who could not provide information on a specific change they hoped to make for the fall semester class.

The sixth and final area for future research is a closer examination of the impact of participation in a Learning Community. The researcher observed professional relationships developing between participants of different departments at STC. Are there long-term benefits to participation in Learning Communities versus one-time professional development training? Does the shared experience of the community result in greater change?

## **Conclusion**

Faculty attending professional development, such as *Scholar to Scholar*, benefited from the experience of learning new classroom and scholarly teaching strategies. Most participants had already begun implementing new strategies or had a plan to begin doing so in fall 2017. It is important for Technical College and other institutes of higher education to implement professional development for teachers, first to create awareness and exposure to new instructional strategies, and second, to provide the tools and support for faculty to improve their courses and better engage students in their coursework. Faculty may benefit from the interdepartmental relationships built while participating in a learning community.

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## **Appendix A**

### ***Scholar to Scholar* Presentations**

Presentation Title (Presenter)	Objectives and Sources provided by presenter
Orientation Session	<p>Barkley, E.F. (2009). <i>Student engagement techniques: A handbook for college faculty</i>. Hoboken, NJ: Jossey-Bass.</p> <p>Gabriel, K.F. (2008). <i>Teaching unprepared students: Strategies for promoting success and retention in higher education</i>. Sterling, VA: Stylus Publishing.</p> <p>O'Brien, J.G., Millis, B.J., &amp; Cohen, M.W. (2008). <i>The course syllabus: A learning-centered approach</i>. Hoboken NJ: Jossey-Bass.</p>
Session One: Teacher and Student Perception (DK)	<ol style="list-style-type: none"> <li>1. Exhibit understanding of teacher perception and teacher enthusiasm.</li> <li>2. Demonstrate the ability to analyze their perception and level of enthusiasm's impact on their student and classroom culture.</li> <li>3. Demonstrate the ability to identify, evaluate and apply techniques for improving their perceptions and level of enthusiasm.</li> </ol> <p>Cooper, K.S., &amp; Miness, A. (2014). The co-creation of caring student-teacher relationships: Does teacher understanding matter?. <i>The High School Journal</i>, 264-290.</p> <p>Mazar, J.P. (2013). Associations among teacher communication behaviors, student interest, and engagement: A validity test. <i>Communication Education</i>, 62(1), 86-96.</p> <p>Zhang, Q., (2014). Assessing the effects of instructor enthusiasm on classroom engagement, learning goal orientation, and academic efficacy. <i>Communication Teacher</i>, 28(1), 44-56.</p>
Session Two: Designing Materials to Engage the Classroom (MS)	<ol style="list-style-type: none"> <li>1. Articulate the research regarding Web 2.0 tools.</li> <li>2. Apply a Web 2.0 tool to an educational activity.</li> <li>3. Learn and reflect on specific Web 2.0 tools.</li> </ol> <p>Ahmad, A.M., Abdelmunem, A., &amp; Almabhouh, A.A. (2016). The current use of Web 2.0 tools in university teaching from the perspective of faculty members at the college of education. <i>International Journal of Instruction</i>, 9(1), 179-194.</p> <p>Aijan, H., &amp; Hartshorne, R. (2008). Investigating faculty decisions to adopt Web 2.0 technologies: Theory and empirical tests. <i>Internet and Higher Education</i>, 11, 71-80. doi:10.1016/j.iheduc.2008.05.002</p> <p>Buzzetto-More, N. A. (2012). Social Networking in Undergraduate Education. <i>Interdisciplinary Journal Of Information, Knowledge &amp; Management</i>, 763-90.</p> <p>Calvi, L., &amp; Cassella, M. (2013). Scholarship 2.0: Analyzing scholars' use of Web 2.0 tools in research and teaching activity. <i>Liber Quarterly: The Journal Of European Research Libraries</i>, 23(2), 110-133.</p> <p>Chui, M., Miller, A., &amp; Roberts, R. P. (2009). Six ways to make Web 2.0 work. <i>Mckinsey Quarterly</i>, (2), 64-73.</p>
Session Three: Faculty Engagement & Retaining Students in the Classroom (AH)	<ol style="list-style-type: none"> <li>1. Explore shared responsibility for student retention.</li> <li>2. Explore strategies for inclusive learning environments that promote student success and engagement.</li> <li>3. Discuss values in embracing the diversity of thought, identity, and perspectives in learning environments to increase engagement, student success, and retention.</li> </ol>

	Session not conducted. Presenter illness.
Session Four: Developing Relationships Through Effective Communications – Teaching Like a Salesperson (SH)	<ol style="list-style-type: none"> <li>1. The purpose of sales vs. the purpose of teaching.</li> <li>2. Define fiduciary and fiduciary duties.</li> <li>3. Discussion of mission statements for teaching.</li> <li>4. Understand the correlation between sales and teaching.</li> </ol> <p>Fogel, S. H. (n.d.). <i>Teaching Sales</i>. Retrieved from Harvard Business Review.</p> <p>Wake, G. (2015). <i>4 reasons teaching is a sales job</i>. Retrieved from LinkedIn: <a href="https://www.linkedin.com/pulse/teachiners-greatest-sales-force-america-gregory-wake">https://www.linkedin.com/pulse/teachiners-greatest-sales-force-america-gregory-wake</a></p>
Session Five: Facilitating the Classroom (LAC)	<ol style="list-style-type: none"> <li>1. Understand the differences between ‘flipping’ a classroom and ‘facilitating’ a classroom.</li> <li>2. Explain the process of facilitating a classroom.</li> </ol> <p>Bart, M. (2010, February 8). <i>A checklist for facilitating online courses</i>. Retrieved from Faculty Focus: <a href="http://www.facultyfocus.com/articles/distance-learning/a-checklist-for-facilitating-online-courses/">http://www.facultyfocus.com/articles/distance-learning/a-checklist-for-facilitating-online-courses/</a></p> <p>Cisco. (2014, November 5). <i>Working from mars with an internet brain implant: Cisco study shows how technology will shape the "future or work."</i> Retrieved from Cisco: the network: <a href="http://newsroom.cisco.com/press-release-content?type=webcontent&amp;articleId=1528226">http://newsroom.cisco.com/press-release-content?type=webcontent&amp;articleId=1528226</a></p> <p>Huffman, E. (2016, May 10). <i>Engage millennials with a flipped classroom</i>. Retrieved from Association of International Certified Professional Accountants: <a href="https://www.aicpa.org/interestareas/accountingeducation/newsandpublications/pages/flipped-classroom.aspx">https://www.aicpa.org/interestareas/accountingeducation/newsandpublications/pages/flipped-classroom.aspx</a></p> <p>Novotney, A. (2010, March). <i>Engaging the millennial learner</i>. Retrieved from American Psychological Association: <a href="http://www.apa.org/monitor/2010/03/undergraduates.aspx">http://www.apa.org/monitor/2010/03/undergraduates.aspx</a></p>
Session Six: Instructional Design: Putting it All to Together (JW)	<ol style="list-style-type: none"> <li>1. Introduce the concepts of basic Instructional Design and ID models, Universal Design for Learning and Objective-based course design.</li> <li>2. Participants will demonstrate how to use classroom objectives to create an outline, assignments, classroom activities, and assessment.</li> <li>3. Discuss course design to effectively teach non-traditional students.</li> </ol> <p>Allen, M.J. (2000). Teaching nontraditional students. <i>APS Observer</i>, 13(7).</p> <p>Mergel, B. (1998). Retrieved from <a href="http://etad.usak.ca/802papers/mergel/brenda.htm">http://etad.usak.ca/802papers/mergel/brenda.htm</a></p> <p>Taylor, L. (n.d.). Educational theories and instructional design models. Their place in simulation. <i>Nursing Education and Research, Southern Health</i>.</p>

## **Appendix B**

### **Consent**



Title of Study: Technical College Faculty Perceptions of Professional Development on Intended Instructional Strategies

Investigator: Michelle L. Davis

This research is being conducted as part of my dissertation conducted under the supervision of Dr. Sara McNeil.

### Non-Participation Statement

Taking part in the research project is voluntary and you may refuse to take part or withdraw at any time without any penalty or loss of benefits to which you are otherwise entitled. You may refuse to answer any research-related questions that make you uncomfortable.

### Purpose of the Study

As a participant of the Spring 2017 *Scholar to Scholar* development program, you are being asked to take part in this research study. It is important before deciding to participate in this study that you understand why the research is being done and what participation in the study means.

#### *Why is this research being done?*

The purpose of this study is to gain an understanding of how technical faculty plan to implement changes in their classrooms following participation in the faculty professional development program entitled *Scholar to Scholar*. *Scholar to Scholar* is a semester long program offering a series of 6 seminars on teaching strategies, perception, Web 2.0 tools, instructional design, and communication.

Faculty are expected to attend professional development, but often enthusiasm wanes after attendance. With the development being designed to encourage the creation of course specific tools for later use, it is thought follow through by faculty will improve.

#### *How long will the research last?*

I expect that you will be in this research study for approximately one month. This time will include a one on one interview lasting no more than 45 minutes and one classroom observation during the first two weeks of the Fall 2017 semester. Data analysis will last for approximately 6 weeks.

#### *What happens if I say yes, I want to be in this research?*

Should you choose to participate in this study, you will be one of 5-7 subjects.

This research project will include one face to face audio recorded interview regarding your experience in *Scholar to Scholar* and your intent to alter your course as a result of participating. Interviews will be conducted in a private location decided on by you and the Investigator prior to the start of the Fall 2017 semester. This interview will last no more than 45 minutes.

This research project will also include a classroom observation conducted by the investigator. This observation will last approximately one hour. The standard classroom observation form will be completed, with notes on engagement with students, activity outside of traditional lecture, adjustment of course based on student questions/feedback, observation of verbal and non-verbal behaviors of faculty. Differences between pre and post observations to be noted. Both pre and post classroom observations are standard in the *Scholar to Scholar* program.

#### Agreement for the use of audio recording

If you consent to take part in this study, please indicate whether you agree to be audio recording by checking the appropriate box below. Then, indicate whether the audio recording may be used in publication/presentations. If you do not agree to be audio recorded, you may still participate in this study through the use of *Scholar to Scholar* artifacts and fall classroom observation.

\_\_\_\_\_ I agree to be audio recorded during the research study.

\_\_\_\_\_ I agree that the audio recording can be used in publication/presentations.

\_\_\_\_\_ I do not agree that the audio recording can be used in publication/presentations.

\_\_\_\_\_ I do not agree to be audio recorded during the research study.

#### ***What happens if I say yes, but I change my mind later?***

You can leave the research at any time, it will not be held against you.

If you decide to leave the research, artifacts collected during the normal course of *Scholar to Scholar* (pre and post questionnaires and pre-*Scholar to Scholar* classroom observations), will remain part of the research study.

#### ***Is there any way being in this study could be bad for me?***

There are no foreseeable risks related to the procedures conducted as part of this study. There are no costs to you for participating in this research study.

#### ***What happens to the information collected for the research?***

Taking part in this research is confidential and information will not be linked to your identity. Every effort will be made to maintain the confidentiality of your participation in this project. Each subject's name will be paired with an alias selected by the participant. This name will appear on all written materials. Real names will be redacted from all written material, including questionnaires. The list pairing the real names with the aliases will be kept separate from all other research materials. Notes, interview transcriptions, audio recording, and any other identifiable information will be kept on a flash drive and locked in a filing cabinet.

I may publish the results of this research. However, unless otherwise detailed in this document, I will keep your name and other identifying information confidential.

***Who can I talk to?***

This research has been reviewed and approved by the University of Houston Institutional Review Board (IRB). You may also talk to them at (713) 743-9204 or [cphs@central.uh.edu](mailto:cphs@central.uh.edu) if:

- Your questions, concerns, or complaints are not being answered by the research team.

You cannot reach the research team.

You want to talk to someone besides the research team.

You have questions about your rights as a research subject.

You want to get information or provide input about this research.

Your signature documents your consent to take part in this research.

---

Signature of subject

---

Date

---

Printed name of subject

---

Signature of person obtaining consent

---

Date

---

Printed name of person obtaining consent

## **Appendix C**

### **Classroom Observation Checklist**



### Classroom Observation Checklist

Name \_\_\_\_\_ T Number \_\_\_\_\_  
 Course \_\_\_\_\_ Date \_\_\_\_\_  
 Observer \_\_\_\_\_ Department \_\_\_\_\_

\*All items marked N/A must be explained in Comments

	Excellent	Good	Satisfactory	Needs Improvement	N/A
<b>Class Structure</b>					
Reviews previous day's course content	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Gives overview of day's course content	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Summarizes course content covered	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Directs student preparation for next class	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Methods</b>					
Provides well-designed materials	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Employs non-lecture learning activities (i.e. small group discussion, student-led activities)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Invites class discussion	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Employs other tools/instructional Aids (i.e. technology, computer, video, overheads)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Delivers well-planned lecture	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Teacher-Student Interaction</b>					
Solicits student input	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Involves a variety of students	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Demonstrates awareness of individual student needs	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Content</b>					
Appears knowledgeable	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Appears well organized	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Explains concepts clearly	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Relates concepts to student's experiences	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Selects learning experiences appropriate To level of learning	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Comments:**

Observer Signature \_\_\_\_\_ Date \_\_\_\_\_

Attach additional pages if necessary

9-9-2015

Y:\Academic Affairs Documents\Forms\Faculty

## **Appendix D**

### ***Scholar to Scholar* Pre Questionnaire**

### Scholar to Scholar Questionnaire

Name: \_\_\_\_\_

Title: \_\_\_\_\_ Phone: \_\_\_\_\_

1. Your Department:

- \_\_\_\_\_ Allied Health and Science
- \_\_\_\_\_ Business Technologies
- \_\_\_\_\_ General Education/Developmental Studies
- \_\_\_\_\_ Public Service and Safety
- \_\_\_\_\_ Technology

2. Including Spring 2017, how long have you been employed as a FULL-TIME faculty (LIT or other appointment)?

- \_\_\_\_\_ Not Applicable
- \_\_\_\_\_ Less than one year
- \_\_\_\_\_ 1-3 years
- \_\_\_\_\_ 4-7 years
- \_\_\_\_\_ 8-12 years
- \_\_\_\_\_ 13-17 years
- \_\_\_\_\_ 18-22 years
- \_\_\_\_\_ 23+ years

3. Including Spring 2017, how many years have you been employed as ADJUNCT faculty (LIT or other appointments)?

\_\_\_\_\_ Not Applicable  
\_\_\_\_\_ Less than one year  
\_\_\_\_\_ 1-3 years  
\_\_\_\_\_ 4-7 years  
\_\_\_\_\_ 8-12 years  
\_\_\_\_\_ Over 12 years

4. Describe your best professional development experience?

5. Describe your least favorite professional development experience?

6. Describe in detail how you learned to teach. Think of experiences you may have had prior to your first college teaching job.

7. List and describe three specifics that let you know you are a good instructor.

8. List three specifics you would like to improve on to become an excellent instructor.

## **Appendix E**

### ***Scholar to Scholar Post-Questionnaire***

## SCHOLAR TO SCHOLAR POST- QUESTIONNAIRE

1. In your opinion, which session of *Scholar to Scholar* provided you with the most useful information to improve your teaching? Why?
2. What changes, if any, have you made in your teaching strategies since the start of *Scholar to Scholar*?
3. How will you use the information/skills from *Scholar to Scholar* to improve your course for fall?



**Appendix F**  
**Interview Protocol**

## Interview Protocol

The following Interview Protocol will be used to interview faculty who participated in the Spring 2017 semester professional development program entitled *Scholar to Scholar*. This protocol was prepared with basic assumptions in mind:

- Faculty knowledge of teaching strategies is varied
- Faculty have differed experiences participating in professional development
- Faculty who work at technical colleges have varied education levels
- Faculty who work at technical college have varied work experience
- Faculty present different attitudes of work, the classroom, and professional development

### Topic Domain One: Teaching Style

Lead off question: *I observed you in class last spring semester for Scholar to Scholar, but I want to know more about how you conduct your courses day by day. Take me through a regular class period. Don't worry about giving me too much information, I want to know as much as possible!*

Covert categories: Current teaching methods, faculty perception, faculty self-perception

Possible follow-up questions:

- Does your class have a separate lab or is it all in a regular classroom?
- Do you teach any courses completely online?
- What percentage of class time do you lecture?
- What other classroom activities do you do besides lecture?
- As faculty, what challenges have you experienced in the classroom?
- As faculty, what do you find most satisfying in the classroom?
- What do you most want to improve in your classroom or with yourself as an educator?

### Topic Domain Two: Professional Development prior to *Scholar to Scholar*

Lead off question: *Describe the professional development experiences you have had since being employed at STC. Do not include Scholar to Scholar. Again, please provide as much detail as possible.*

Covert categories: Relevance of professional development to teaching strategies, lack of professional development, professional development before employment at STC.

Possible follow-up questions:

- Prior to *Scholar to Scholar* have you had any professional development directly related to teaching?
- Have you made changes in your classroom or teaching style based on information learned in previous professional development? If yes, please describe.
- Prior to employment at STC, did you participate in professional development? If yes, please describe.

### **Topic Domain Three: Participation in *Scholar to Scholar* sessions**

Lead off question: *Here is a list of sessions presented during Scholar to Scholar. Which session or which part of a session did you find most useful?*

Covert categories: Specific session popularity, faculty perception of what worked well, what did not, abstract vs. concrete topics

Possible follow-up questions:

- Why was \_\_\_\_\_ your favorite session?
- How could the other sessions be changed to make them more relevant to you?
- During *Scholar to Scholar* some faculty said they made changes to their course in spring. If you did, what kinds of changes did you make?
- Did you prefer abstract topics or concrete topics? Explain.

### **Topic Domain Four: Long-term changes to your course**

Lead off question: Has participation in *Scholar to Scholar* changed how you intend to teach your course in the fall semester? If so, how?

Covert categories: Faculty follow-up, continuation of enthusiasm, suggestions for improvement

Possible follow-up questions:

- If making changes:
  - Tell me one specific change you are going to make. What is the anticipated outcome of this change?
  - What changes do you hope or expect to see in your students after these changes are made?
  - What changes do you want/hope to make in your teaching delivery?
  - Do you foresee any challenges in implementing these changes? If yes, please explain.
  - Have you used the books or handouts from *Scholar to Scholar* in preparing for fall?
- For all:
  - What suggestions do you have for creating useful faculty development for faculty?

**Appendix G**  
**IRB Information**

DIVISION OF RESEARCH  
Institutional Review Boards  
APPROVAL OF SUBMISSION

August 2, 2017 Sara

McNeil smcneil@uh.edu

Dear Sara McNeil:

On July 20, 2017, the IRB reviewed the following submission:

Type of Review:	Initial Study
Title of Study:	Technical College Faculty Perceptions of Professional Development on Intended Instructional Strategies
Investigator:	Sara McNeil
IRB ID:	STUDY00000391
Funding/ Proposed Funding:	Name: Unfunded
Award ID:	
Award Title:	
IND, IDE, or HDE:	None
Documents Reviewed:	<ul style="list-style-type: none"> <li>• Consent form (updated), Category: Consent Form;</li> <li>• Phoe Script, Category: Study tools (ex: surveys, interview/focus group questions, data collection forms, etc.);</li> <li>• Addiitonal Approval for Archival Data, Category: Letters of Cooperation / Permission;</li> <li>• Interview Protocol, Category: Study tools (ex: surveys, interview/focus group questions, data collection forms, etc.);</li> <li>• Classroom Observation Checklist, Category: Study tools (ex: surveys, interview/focus group questions, data collection forms, etc.);</li> <li>• Approval to Conduct Research from Lamar University, Category: Letters of Cooperation / Permission;</li> <li>• Protocol for Michelle Davis (revised as per IRB), Category: IRB Protocol;</li> </ul>
Review Category:	Exempt
Committee Name:	Not Applicable
IRB Coordinator:	<a href="#">Sandra Arntz</a>

**DIVISION OF RESEARCH**

Institutional Review Boards

The IRB approved the study from August 2, 2017 to July 19, 2022, inclusive.

To ensure continuous approval for studies with a review category of “Committee Review” in the above table, you must submit a continuing review with required explanations by the deadline for the June 2018 meeting. These deadlines may be found on the compliance website

(<http://www.uh.edu/research/compliance/>). You can submit a

continuing review by navigating to the active study and clicking “Create Modification/CR.”

For expedited and exempt studies, a continuing review should be submitted no later than 30 days prior to study closure.

If continuing review approval is not granted on or before July 19, 2022, approval of this study expires and all research (including but not limited to recruitment, consent, study procedures, and analysis of identifiable data) must stop. If the study expires and you believe the welfare of the subjects to be at risk if research procedures are discontinued, please contact the IRB office immediately.

Unless a waiver has been granted by the IRB, use the stamped consent form approved by the IRB to document consent. The approved version may be downloaded from the documents tab. To document consent, use the consent documents that were approved and stamped by the IRB. Go to the Documents tab to download them.

In conducting this study, you are required to follow the requirements listed in the Investigator Manual (HRP-103), which can be found by navigating to the IRB Library within the IRB system. Sincerely,

Office of Research Policies, Compliance and Committees (ORPCC)

University of Houston, Division of Research

713 743 9204 [cphs@central.uh.edu](mailto:cphs@central.uh.edu)

<http://www.uh.edu/research/compliance/irb-cphs/>



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## Study Team Members

### 1. Identify each additional person involved in the design, conduct, or reporting of the research

**All student-led protocols must designate a faculty sponsor:**

Name	Roles	Financial Interest	Involved in Consent	E-mail	Phone
Sara McNeil		no	no	smcneil@uh.edu	

### 2. External team member information:

**External team member information** ([Click here to download the External Team Member template](#)):

Name	Description
Michelle Davis (student PI)	