

Exploration of global perspectives, teacher passion, and professional commitment of
second stage agriculture teachers in the Western United States

by

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A Dissertation

In

Agricultural Education

Submitted to the Graduate Faculty
of Texas Tech University
and Texas A&M University
in Partial Fulfillment of
the Requirements for
the Degree of

DOCTOR OF EDUCATION

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December, 2018

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ACKNOWLEDGMENTS

I started this Doc@Distance program journey comparing my shiny dream of obtaining my doctorate degree to the shiny stainless art exhibit on the Texas Tech University campus titled “Comma” by artist Po Shu Wang. As I reflect on this journey towards my shining destination, I am reminded of a quote from my favorite book *The Alchemist*: “And, when you want something, all the universe conspires in helping you to achieve it” (Coelho, p. 22). There have been several persons in my universe who have conspired with me.

First, I acknowledge my husband, Travis. You have sacrificed much in helping me reach this goal. I appreciate your patience, your keen grammatical eye, and your sense of humor. Thank you for always being there for me, even when you may not want to be there reading research aloud on the deck, but you do it for me because that is the kind of stellar supportive best friend you are and always have been. I love you dude.

Thank you to my committee chair, Dr. Burris. I appreciate your willingness to take on the challenge of advising and mentoring me from three states away. Without your guidance I would not have been able to complete this journey. I also thank the rest of my committee Dr. Harlin, Dr. Ritz, and Dr. Murphy—I am very appreciative of the opportunity to get to work with each of you and I look forward to future collaborative opportunities. To Clarice Fulton, I hope you realize how much gratitude every member of our cohort has for you. You get to work with a slew of distance

graduate students and we know we can be challenging to deal with so thank you for your patience, knowledge, and willingness to assist.

To the members of Doc@Distance Cohort 7, especially Megan, Nicole, Dan, Michael, and Kalynn; I am so glad I had the opportunity to meet and work with each of you. We knew this program would be a challenge, but I do not think we realized that the friendships and memories we have together would be one of the most rewarding outcomes we have experienced. Thank you for being a part of my professional journey and making my universe a little bit brighter. Cheers!

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ABSTRACT

Teacher retention is an issue among teachers of school based agricultural education (SBAE). While there is a focus on supporting teachers through their induction years, second stage teachers (years 4-10) are frequently ignored as a demographic during in a critical point in their careers. This study sought to describe the global perspectives, teacher passion, and professional commitment as well as demographics of interest in the population second stage teachers of SBAE from two Western states ($N = 286$). The census resulted in a response rate of 43.8% ($N = 116$). Further, the researchers explored these factors among a sub population of second stage teachers who participated in a 10-day intensive professional development event in Ecuador during the Summer of 2018 ($n = 7$).

This quantitative, non-experimental study utilized survey research methods to distribute three instruments: The Global Perspectives Inventory, The Pulse of a Teacher Scale, and the Push Pull Mooring Instrument. This study was conducted in three parts and used descriptive-correlational, static-group comparison, ex post facto, and static-group pretest posttest design to carry out the objectives. In some cases, there were violations to assumptions for parametric statistical tests and the researchers employed non-parametric tests to analyze the data.

Findings indicated second stage teachers of SBAE two Western states are primarily white females between ages 25 and 34 who are in their 5th year of teaching. Further, global perspectives, teacher passion, and gender described an insignificant 3% of the variance in professional commitment among second stage teachers of SBAE. When comparing teachers who elected to participate in the intensive professional development event in Ecuador, there were no significant differences across the variables. Additionally, pretest and posttest data indicated no significant changes in global perspectives, teacher passion, or professional commitment after participating in the event in Ecuador. Results from this study offer a starting point for exploring the second stage teacher of SBAE as well as describing their commitment towards the profession of teaching agriculture at the secondary level.

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CHAPTER I

INTRODUCTION

Background and Setting

Hobbs (2012) said, “When we view teachers as passionate beings we unleash the possibility for them to embrace innovation, and to be desirous in their dealings with students so that they seduce students into caring about the subject” (p. 727). Providing and maintaining a pool of highly qualified and passionate high school agriculture teachers is a national issue. Smith, Lawver, and Foster (2017) reported 721 (6%) of United States secondary agriculture teachers of School Based Agricultural Education (SBAE) did not return to the high school agriculture classroom for the 2016-2017 school year.

The reasons why teachers leave are varied. Retirements contribute to less than one-third of teachers leaving the profession in a given year (Sutcher, Darling-Hammond, & Carver-Thomas, 2016). Goldring, Taie, Riddles, and Owens (2014) reported 55% of teachers leave due to career dissatisfaction. Of those dissatisfied, 9% said there were not enough opportunities for leadership or professional advancement and 14% said they did not have enough autonomy in the classroom. In the end, 31% of these vexed teachers left to pursue a different job and 28% of those who left did so to pursue a career outside of education. Professional learning opportunities, time for collaboration and planning, collegial relationships, and input in decision-making emerged as being associated with attrition (Goldring, et al., 2014). Further, there was a

need to “create productive school environments, including supportive work conditions, administrative supports, and time for teachers’ collaborative planning and professional development—all of which help attract and keep teachers in schools” (Goldring et al., 2014, p. 6). Additionally, the number of teachers leaving differs by career phase. During years 1-3, 7.1% leave; years 4-9, 6.8% leave; years 10-19, 53.9% leave; and years 20 or more, 11.4% leave (Goldring et al., 2014).

There is substantial evidence to support the high levels of motivation and readiness, to contribute to the field of education as a whole, found in teachers beyond their induction years. However “Principals aren’t always equipped with sound strategies to retain such teachers” and these teachers can become bored, frustrated, and stagnate (Doan & Peters, 2009, p. 18). Further, there is a growing body of research suggesting a strong connection between teacher passion and teacher commitment to the profession (Crosswell & Elliott, 2004). Lack of opportunity to invigorate passion in education combined with the increased teaching competence seen in non-induction, specifically second stage (years 4-10) teachers can lead toward the decision to disengage from the profession entirely.

There is little research in agricultural education regarding what constitutes engaging professional development; the majority of the literature focuses on the developmental needs of teachers of SBAE. A synthesis of powerful professional development components by Patton, Parker, & Tannehill (2015) found eight components comprise engaging professional development. First, it is based on the needs and interests of the teachers. It is also social in nature as well as built around

collaboration with other communities of educators. Engaging professional development is sustained throughout the career and treats teachers as active learners. Additionally, it focuses on pedagogical and content knowledge. Engaging professional development is carefully facilitated and targets student learning outcomes as well. To implement these core factors of effective teacher professional development, faculty members at California State University, Chico and Utah State University worked to implement an international professional development event to engage second stage teachers of SBAE from the Western United States.

The 10-day trip to Ecuador was held in July of 2018 and was the focus of professional development for this study. The purpose of the event was to reinvigorate teachers through the lens of international agriculture with the following learning objectives: (a) Re-examine values and priorities to become better contributors to the global education community; (b) Understand the diversity of the host society and better understand the diversity in our own society; (c) Develop a better understanding of global issues in education and gain a heightened awareness of global agricultural concerns; and (d) Improve problem solving skills by developing empathy for others and a trans-cultural perspective by becoming culturally self-aware.

Statement of the Problem

Teacher passion and teacher commitment are related as teacher passion motivates teachers in a self-prescribed difficult role (Crosswell & Elliott, 2004). International experiences have the ability to reinvigorate teachers, creating renewed excitement for teaching (Sandlin, Murphrey, Lindner, & Dooley, 2013). Second stage

teachers of SBAE are a group vulnerable to leaving the profession and are frequently ignored in regard to specific professional development (Conway & Eros, 2016; Draves, 2012; Kirkpatrick & Johnson 2014; Lynn, 2002; Smalley & Smith, 2017).

The guiding question for this study was: What do professional commitment, global perspectives, and teacher passion look like in second stage teachers of SBAE in the Western United States?

Purpose and Objectives

The purpose of this study was to describe the professional commitment, global perspectives, and push pull mooring (PPM) factors of second stage teachers of SBAE from two western states. The objectives for this study were:

1. Describe demographics of interest of second stage teachers of SBAE in the Western United States.
2. Describe global perspectives, teacher passion, and PPM factors of second stage teachers of SBAE in the Western United States.
3. Determine the amount of variance in professional commitment, which can be predicted by a linear combination of global perspectives, teacher passion, and gender.
4. Compare factors, which may influence second stage teachers of SBAE in the Western United States to self-select to participate in an intensive professional development experience.

5. Compare the global perspectives, passion for teaching, and professional commitment of second stage teachers before and after an intensive professional development experience.

Definitions of Terms

The following terms were defined to add transparency for the purpose of this study:

Intensive Professional Development Event-A professional development event concentrated on a single area or subject.

International Experience-An activity conducted in a foreign country.

Professional Development-Defined as “those processes and activities designed to enhance the professional knowledge, skills, and attitudes of educators that they might, in turn, improve the learning of students” (Guskey, 2000, p. 16).

Second Stage- Teachers who have taught 4 to 10 years (Kirkpatrick, 2007).

Teacher Attrition-A reduction in the total number of teachers.

The following terms were defined to describe the variables used to carry out this study:

Global Perspectives-The operationalized definition was “the capacity and predisposition for a person to think with complexity taking into account multiple perspectives, to form a unique sense of self that is value based and authentic, and to relate to others with respect and openness especially with those who are not like (them)” (Braskamp, 2014). For this study, global perspectives was represented by a

summated score on 32 items of the general form of the Global Perspectives Inventory (GPI) representing 3 sub-constructs as follows:

- 1) Cognitive-Assesses one's knowledge about the importance of being culturally aware using 12 items on the GPI.
- 2) Intrapersonal-Weighs ones level of social concern for those from differing cultures using 9 items on the GPI.
- 3) Interpersonal-Appraise one's acceptance of their own identity as well as their respect for the identity of others using 11 items on the GPI.

Push Pull Mooring-Theory of migration in which factors dictate the ease or difficulty one has in making the decision to change professions. This theory is divided into four factors, which are further described by sub-constructs:

- 1) Push Factors-Stressors, which may drive persons from a profession. In this study, push factors are represented by a summated score on 13 items, which include the sub-constructs of professional satisfaction, or positive versus negative affect experienced in the profession (Fu, 2011), and threat of professional obsolescence or, erosion of skills necessary to be a viable professional within the profession (Glass, 2000).
- 2) Pull Factors-Attractors, which may pull persons from one profession to another. In this study, pull factors are represented by a summated score on three items assessing the availability of professional alternatives, or other professions available to the individual (Fu, 2011)

- 3) **Mooring Factors-Variables**, which hinder or facilitate movement from one profession to another. In this study, a summated score on 10 items represents mooring factors. The two sub-constructs are professional investment or, “accumulated investment in one’s career that would be lost or deemed worthless if one was to pursue a new career” (Fu, 2011, p. 282), and professional self-efficacy described as self-judgement of one’s own abilities at carrying out the tasks of the profession (Bandura, 1986; Fu, 2011).
- 4) **Professional Commitment**-In this study, the variable was defined as “belief in and acceptance of the goals and values of a profession, a willingness to work hard on behalf of the profession, and a strong desire to remain in a profession” (Bergmann, Lester, DeMeuse, & Grahn, 2000, p. 17). For this study, professional commitment was represented by a summated score on nine items, which are broken down into the sub-constructs of professional identity, professional planning, and professional resilience.

Teacher Passion –The operationalized definition was “a strong inclination or desire towards an activity that one likes and finds important and in which one invests time and energy” (Carbonneau, Vallerand, Fernet, & Guay, 2008, p.978). For this study, the defined activity was teaching SBAE, which was represented by a summated score on the 20 items of the Pulse of a Teacher instrument.

Limitations of the Study

When generalizing the results of this study concerning other populations, it is important to take into account the following limitations. First, as the population of second stage teachers of SBAE were solely from California and Utah, applying the results to teachers outside these states is not within the scope of this study. Further, during the inaugural year of the intensive professional development event for second stage teachers the program was only available to teachers in California and Utah. Thus, the accessible population was limited to participants from these two states. As credentialing mechanisms within each state and between California and Utah differ, it should also be recognized that teachers may have pursued different routes to obtaining their teacher licensure. Finally, teachers may have entered the profession at different ages, or with varying undergraduate and professional backgrounds.

Basic Assumptions

This study was conducted during the Spring and Summer of 2018 in the states of California and Utah. The group of second stage teachers of SBAE were no different than second stage teachers in previous years. They would have obtained their credentials during the same time period, meeting the same credentialing requirements put forth by their respective states, regardless of the credentialing institution. Additionally, all second stage teacher would have been teaching during the same time period experiencing the same challenging and agreeable moments with in the profession of agricultural education and education climate as a whole. In regard to the

intensive professional development experience in Ecuador, the researchers assumed that the participants come from varying backgrounds and may, or may have not, traveled abroad previously.

Professional Significance

This study aligned directly with research priority number five of the American Association for Agricultural Education (AAAE) National Research Agenda: Efficient and Effective Agricultural Education Programs. The retention of secondary teachers of SBAE will impact "...recruiting and preparing qualified graduates to enter careers in agricultural sciences" (Roberts, Harder, & Brashears, 2016, p. 42). "Continued research in the context of agricultural education – formal and non-formal education settings – is needed to evaluate the effectiveness of these established professional development attributes and can greatly improve the body of knowledge on effective professional development" (Thoron, Myers, & Barrick, 2016, p. 45).

The intent of this study was to bring clarity to how professional commitment, global perspectives, and teacher passion look within our population of second stage teachers and how intensive professional development might influence those constructs. A renewed focus on the retention of teachers, particularly those that are second stage, could help resolve a portion of the teacher shortage issue in respect to agricultural education.

Additionally, this study brought to light the use of PPM in reference to the professional commitment of second stage teachers of SBAE. While PPM factors have been used to study the migration of populations, customers, and those employed in

internet technology fields, the concept had yet to be utilized in relation to professional migration in education. Further research of this instrument could impact the recruitment and retention of teachers of SBAE, describe reasons for professional changes in agricultural education, or perhaps help explain reasons why second stage teachers of SBAE choose to stay committed to the profession.

SUMMARY

Teacher retention is paramount to ensure a pool of highly qualified teachers available to work in SBAE. Professional development serves as a mechanism, which can aid in the retention of teachers within the profession of agricultural education. Increasing teacher passion can invigorate them to be more effective, resilient teachers who more positively serve the needs of a greater number of students. The use of intensive professional development in the form of an international experience may affect the commitment of second stage teachers of agriculture to the profession of teaching agriculture as well as alter their global perspectives and passion for teaching. Additionally, better understanding the professional commitment of our second stage teachers may allow for more tailored approaches to solving the teacher shortage issue from the standpoint of retention.

CHAPTER II

REVIEW OF LITERATURE AND FRAMEWORKS

Purpose and Objectives

The purpose of this study was to describe the professional commitment, global perspectives, and push pull mooring (PPM) factors of second stage teachers of school based agricultural education (SBAE) from two western states. The objectives for this study were:

1. Describe demographics of interest of second stage teachers of SBAE in the Western United States.
2. Describe global perspectives, teacher passion, and PPM factors of second stage teachers of SBAE in the Western United States.
3. Determine the amount of variance in professional commitment, which can be predicted by a linear combination of global perspectives, teacher passion, and gender.
4. Compare factors, which may influence second stage teachers of SBAE in the Western United States to self-select to participate in an intensive professional development experience.
5. Compare the global perspectives, passion for teaching, and professional commitment of second stage teachers before and after an intensive professional development experience.

REVIEW OF LITERATURE

Second Stage Teachers

The second stage can be found as a component across teacher career cycle theories in relation to professional needs. The following offers an overview of teacher career cycle literature. However, it should be noted the focus of this research is specifically the second stage.

Sikes (1985) used the age of the teacher to place individuals in to career phases, under the assumption that teachers would start their career in their early 20's. Sikes's (1985) model is built upon the idea that teachers must learn how to "adapt to growing old" (p. 27) in the profession. The Teacher Career Cycle Model depicts a cyclical path teachers take from pre-service through career exit (Fessler & Christensen, 1992). Leithwood (1992) used the work of Fessler and Christensen (1992), overlapped with Sikes (1985) to create five teaching phases: 1) Launching 2) stabilizing, 3) following stabilization, 4) professional plateau, and 5) preparing for retirement. What makes Leithwood's model different, was that it more closely examined how the cycle and professional needs interacted with one another (Leithwood, 1992).

Huberman (1993) looked at teachers for common themes indicating burnout being more centered on a specific career timeline. Steffy (2000) identified six stages (novice, apprentice, professional, expert, distinguished, and emeritus) in the life cycle of a teacher while stressing the importance of teacher and administrative collaboration

for helping individuals progress throughout the cycle. In 2008, Day went a step further and identified six stages, labeled by number of years teaching, of teacher career cycle based on sustained commitment to the profession.

The concept of the second stage teacher is emerging and can only be found in literature as far back as 2007. The root of the theory of the second stage teacher is in the music education field (Kirkpatrick, 2007). This second stage overlaps with the aforementioned theories about teacher career cycle, which can be seen in Table 2.1, but is specifically tied to teachers who are in their 4th to 10th year of teaching. This is similar to the work of proposed stages of Huberman (1993) and Day (2008) in that years within the profession are prescribed. However, the theory of the second stage teacher encompasses pieces across teacher career cycle literature as second stage teachers exhibit specific characteristics such as shifting their focus beyond their classrooms and at the broader scope of education (Eros, 2009). Additionally, they require continuous, personalized professional development (Eros, 2009).

Table 2.1

Second Stage Teachers Across Teacher Career Cycle Literature

Author	Name of Stage	Characteristics
Sikes (1985)	Phase two (no years specified)	Ages 28-33, assumes all teachers start in early 20's (does not factor in alternatively certified teachers), pedagogical interest grows, no longer concerned with just survival
Fessler & Christenson (1992)	Competency Building (no years specified)	Improving teaching skills, seeking out new material/methods/strategies, receptive to new ideas, see work as challenging but are eager
Leithwood (1992)	Stabilizing (no years specified)	Coincides with receiving permanent contract and making deliberate commitment to profession, at ease in the classroom, feel need to participate in change efforts, teachers act more independently
Huberman (1993)	4-6 years (Stabilization)	Make durable commitment to teaching, sense of belonging professionally, begin to consolidate pedagogical skills and materials at classroom level
Steffy (2000)	Professional (no years specified)	Shift from needs of teacher to needs to students, increased self-confidence leading to commitment to profession, constantly seeking growth and becoming more active with colleagues, focus on reflection and renewal
Kirkpatrick (2007)	4-10 years (Second Stage)	Move focus from classroom to education in a broader scope, competent and ready to make conscious commitment to teaching
Day (2008)	4-7 years (Induction) 8-15 years (Early)	Induction-increased confidence, development of identity as an educator, an acceptance of additional responsibilities adding to their workload Early-Managing roles and identity in their professional and personal lives, sustained engagement, making decisions about progression of their career

When using Kirkpatrick's (2007) model of the second stage teacher, Conway and Eros (2016) identified four themes when describing the teaching experiences of second stage teachers of music: (a) feeling settled, (b) assuming leadership, (c) uncertainty, and (d) seeking new challenges. Second stage teachers who feel more settled are experiencing less difficulty in the classroom and are shifting focus from concentrating on themselves as educators towards concentrating on their students' needs (Draves, 2012). In a study across content areas of second stage teachers, they were found to be more confident and autonomous requiring little guidance. Teachers in the second stage had high levels of self-efficacy and sought opportunities to improve themselves in order to better fit student learning needs (Steffy, Wolfe, Pasch, and Enz, 2000). "The most noticeable difference between apprentice and professional teachers is increased self-confidence, which leads to commitment to the profession" (Steffy et al., 2000, p. 63). Kirkpatrick (2007) reiterated this: "...in contrast to their novice years, the confidence and competence they feel as second stage teachers provide them with greater flexibility about how to allocate their time and energy" (p. 23). This increase in confidence is a threat to the retention of second stage teachers, as job engagement is critical (Kirkpatrick, 2007). It has been recognized that the feeling of settlement leads to a conscious commitment to teaching (Eros, 2013a).

This cognizant choice to be engaged in the profession ties into second stage teachers' willingness to assume leadership roles. These roles extend to the school community and relate to mentoring student and induction teachers as second stage teachers are more focused on their colleagues concerning collaborative professional

development (Draves, 2012; Eros, 2013b; Eros, 2016; Smalley & Smith, 2017). This collaboration can benefit teachers of the second stage two-fold—first by allowing them to learn from their peers and second by giving them opportunity to mentor others. Eros (2013b) called for greater involvement of second stage teachers in the induction of new teachers. Being able to mentor pre-service and induction teachers allows second stage teachers the opportunity to express their professional identity as a competent teacher (Draves, 2012). Additionally, Conway and Eros (2016) suggested second stage teachers seek to lead workshops and presentations as a challenge to help engage them as educators. Second stage teachers are adept and they are willing to share their knowledge with others following in their career path.

Second stage teachers are able to sense their own transition from induction to the second stage via their perceived changes in self-confidence in the management of their classrooms and programs (Eros, 2013a). However, those changes may be increases or deficits in self-confidence as they also feel an uncertainty regarding their future as a teacher (Eros, 2013a). Education policy, budgetary issues, and the observations of their peers not remaining in the profession cause this uncertainty (Eros, 2013a).

With regard to feelings of uncertainty, second stage teachers are still vulnerable in their newly developed expertise. There is an increased freedom of engagement as their competence increases and some may redirect their attention away from teaching which draws their focus away from students (Kirkpatrick & Johnson, 2014). Additionally, second stage teachers have been in the profession long enough to

witness some colleagues leave teaching. Tenure does not always contribute to the feeling of security within the profession of teaching (Conway & Eros, 2016). The second stage teachers may ask themselves if they have progressed as far as they can in the profession and what else might be out there for them

This ties into the second stage teachers' characteristic need to seek new challenges as an educator. Some may exit the profession to new careers or to graduate school opportunities (Conway & Eros, 2016). This group has "demonstrated competence but needs new objectives" and that can be dangerous if no one is there to guide them as they are at a pivotal point to determine their professional futures (Conway & Eros, 2016, p. 228). The second stage teacher is seldom recognized by administration (Kirkpatrick & Johnson, 2014). A qualitative analysis of second stage music teachers showed administration offered no support as second stage teachers were not perceived to be problematic (Eros, 2013a). Eros (2011) said second stage teachers are at the risk of being ignored by administration because they are capable. This leads to the fact that campus leadership, in the form of administration, tends to not be a motivating factor for teachers of the second stage (Eros, 2013b). Their proficiency in running their own classrooms and meeting the needs of their students has led the second stage teacher to be a forgotten demographic on most campuses.

Another area influencing the second stage teacher in relation to recognition is that of occupational identity, specifically in relation to student success. As students are more successful, the second stage teacher feels more analogous with the label of teacher (Draves, 2012). Complimenting this identity-building factor is that of parental

recognition. Affirmation from parents that the teacher has increased the success of the student affects second stage teacher occupational identity (Draves, 2012). When students are not successful, the second stage teacher has not met the needs of the audience they are focused on. If students are successful and the parents do not recognize the efforts of the second stage teacher, they do not feel adequate. This, combined with lack of administration attention can lead to the disengagement of the second stage teacher in the profession of teaching.

Uncertainty and lack of acknowledgement are not the only threats to the engagement of the second stage teacher in education. In a study of 2014 National Association of Agricultural Education (NAAE) XLR8 conference participants, time, time management, and work life balance were identified as challenges to mid-career teachers in their 7th to 15th year of teaching (Smalley & Smith, 2017). Further, Eros (2013a) found second stage teachers of music felt they had inadequate time to reflect on their teaching practices.

When given the opportunity to cogitate on what might benefit the second stage teacher concerning professional development, peer collaboration emerged as a high-impact activity. Participants in the 2014 NAAE XLR8 noted meeting other educators at conferences as a valuable means of professional development (Smalley & Smith, 2017). Draves (2012) found the most beneficial professional development between second stage teachers of music to be informal collaboration between colleagues. Eros (2013b) corroborated informal collaboration with peers to be valuable to the professional development of second stage teachers of music.

Additional research indicated informal collaboration is not the only way our second stage teachers can be developed as professionals. Eros (2011) affirmed second stage teachers need sustained professional development as “second stage teachers who are not vigilant regarding personal and professional needs may quickly become at risk for burnout or attrition” (Conway & Eros, 2016, p. 229).

The research revealed many efforts are taken to look into the professional development needs of induction teachers, but the rest of the profession is grouped together with little differentiation, and “as a result, a vital segment of the teaching force is overlooked” (Eros, 2011, p. 68). Teachers who are successful at developing in this phase may go on to have a long and happy career, while others may exit early (Lynn, 2002). Additionally, Day (2008) said commitment declines with advancement of career and called for specific professional development for mid-late career teachers. In explicit reference to agricultural education, Smalley and Smith (2017) called for intentional, targeted professional development to support mid-career teachers of SBAE as they transition through the shift from their induction years, as well as more research on mid-career teachers of SBAE as a demographic.

Professional Commitment

Blau (1985) described the idea of commitment as a general state of psychological attachment. Teachers must be deeply attached to the charge of educating our youth. Pledging themselves towards the profession of teaching could translate to longevity within the profession. Commitment level can be seen in degree of persistence when faced with challenges (Colarelli & Bishop, 1990).

Specific forms of commitment exist in relation to work functions. Employee commitment provides individual eagerness to remain a part of work-related groups (Bergmann et al., 2000). Within the construct of employee commitment, Bergmann et al. (2000) described three facets of employee commitment; organizational commitment, professional commitment, and professional association commitment. Professional commitment marked individual “belief in and acceptance of the goals and values of a profession, a willingness to work hard on behalf of the profession, and a strong desire to remain in a profession” (Bergmann et al., 2000, p. 17). Giffords (2009) said professional commitment is an “individual’s attachment to their profession” (p. 388). It has also been described as one’s loyalty to the profession (Teng, Shyu, & Chang, 2007). Organizational commitment reflects similar belief in regards to the organization itself while professional association commitment refers to employee union groups (Bergmann et al., 2000). Lee, Carswell, and Allen (2000) discussed occupational and career commitment as constructs. Occupational commitment offers a broader scope of commitment including both professional and non-professional members of the occupational field (Blau, 1988).

Career and occupation are used interchangeably in the literature, although career is defined more vaguely with at least three different explanations for the term (Carson & Bedeian, 1994). For the intentions of this research, professional commitment was considered the most appropriate form of commitment due to the requirements one must meet to become a teacher. Additionally, it can be differentiated

from commitment to short-term objectives, as in the case of career commitment, and organizational buy-in (Hall, 1971).

Crutchfield, Ritz, and Burris (2013) correlated occupational commitment to retention of teachers of SBAE, finding a negative correlation of low magnitude. McKim, Sorenson, Velez, and Henderson (2017) discovered mid-career teachers were less committed than their early and late-career counterparts were. Professional commitment has been used to explain intent to leave the profession in a study among persons in the medical industry (Blau & Lunz, 1998), but little can be found regarding the exploration of professional commitment as a factor impacting attrition among teachers; particularly teachers of SBAE. Gaps also exist in the literature in regards to intensive professional development and its impact on professional commitment.

Global Perspectives

Braskamp (2008) inferred teachers must provide experiences allowing students the opportunity to express how they relate to others on a global level. Further, this idea of cultivating global citizenship goes beyond the context of solely recognizing differences.

What is important is that we do not limit our perspective to cultural differences that historically have been associated with nations and countries. We instead need to understand and respect justice, equity, fairness, and equal opportunities as virtues and values that should not be viewed as assumed universal truths, but important and contested goals and ends in our dialogues that also accept different traditions. (Braskamp, 2008, p. 4)

International experiences are powerful and enhance the lives of the individuals who participate. High school students who participate in international experiences have increased confidence in themselves (Bruening, Lopez, McCormick, & Dominguez, 2002). International experiences create confidence and independence, as well as cultural awareness, in student teachers (Stephens, & Little, 2008). In a study inquiring pre-service teachers after an international travel experience in South Korea, Foster, Rice, Foster, and Barrick (2014) indicated participants increased their knowledge regarding the country traveled in and their perceived ability to acquire knowledge as a global citizen.

Tichnor-Wagner, Parkhouse, Glazier, and Cain (2016) discussed globally competent teachers in the Southeast citing intentional integration of global topics, ongoing authentic engagement with global issues, and connection with teachers' global experiences to be signs of global competence in the classroom. United States English teachers who participated in a three-week immersion program in Korea found their teaching methods transformed concerning culturally responsiveness, especially with respect to empathy toward English language learners (Oh & Nussli, 2014). Further, the international experience was perceived as very valuable as "participants acknowledged that they learned far more in this overseas immersion program than they would have by taking a class in multicultural awareness," (Oh & Nussli, 2014, p. 83).

College faculty have increased teaching credibility and cultural awareness after participating in international experiences (Hand, Ricketts, & Bruening, 2007).

International experiences also refresh teachers, making them more excited about teaching (Sandlin et al., 2013). Those who have participated in international experiences have changed attitudes concerning the importance of international experiences as well as the importance of meeting and engaging with colleagues during the international experience (Roberts et al., 2016). Teachers of SBAE perceive international experience participation to be beneficial to their career (Danjean, McClure, Bunch, Kotrlik, & Machtmes, 2004).

However, few teachers have the opportunity to travel outside of the United States (Hurst, Roberts, & Harder, 2015). Thuemmel and Welton (1983) assessed international educational activities among teachers of SBAE: “Prior to this study very little information was available regarding the extent to which United States agricultural teachers and extension educators were involved, or even interested in international activities” (p. 40). This included during their undergraduate experience. Only 1.3% of students in post-secondary agriculture majors have ever studied abroad (Institute of International Education, 2011). In a national study of teachers of SBAE, Hurst et al. (2015) indicated 50.9% of teachers had lived outside of the United States for professional reasons for some duration of time. When asked how they learned about global agriculture, 54.2% claimed through selected television programs, while 51.1% said through professional development with a global focus (Hurst et al., 2015). Thuemelle and Welton (1983) found international involvement to be the lowest in the Western region, which included California and Utah, with only 29% of teachers having ever traveled internationally in their lives.

While individuals may be willing to participate in international experiences, and see value in the experiences, there are barriers to their participation. Extension educators in Louisiana, identified conflict with existing work schedules and lack of international program awareness as barriers to participation (McClure, Danjean, Bunch, Machtmes, & Kotrlik, 2014). Murphrey, Lane, Harlin, and Cherry (2016) used the theory of planned behavior to identify reasons why students choose to or not to participate in international experiences as college students. Costs and safety concerns arose as reasons not to participate, while access to hands-on activities, opportunity for personal growth, and experiences that were comprised of fellow agricultural science students served as items, which may motivate individuals to participate (Murphrey, et al., 2016). Further, in a study assessing parents' perceptions of international experiences at three Southern Land-Grant institutions, results indicated participants only somewhat supported the idea of their children participating in an international experience (Redwine et al., 2017).

There is little research related to the experiences of teachers of SBAE and international experiences, particularly in reference to career phase. Hurst et al. (2015) recommended investigating the impacts of international experiences by career phase. Conner, Gates, and Stripling (2017) identified five categories as topical areas to construct international experience curriculum for teachers of SBAE: Production, business, culture, environment, and global awareness. The literature revealed common purposes of international experiences to be improving content knowledge, cultural awareness, teaching credibility, global perspective, and the implementation of

international concepts (Hand, et al., 2007; Stephens & Little, 2008; Murphrey et al., 2016). While these topical areas and purposes address the professional development of those involved, they do little to identify if the experience affects the level of professional commitment or passion for teaching a participant accrues during the experience.

Developing cultural responsive behaviors and global awareness has become more important to teachers over time. The United States Census Bureau (2010) reported that, in 1970, 8.8% of California's population was born in a foreign country and 2.1% of Utah's population was foreign born. As of 2016, 27% of California's population and 8.8% of Utah's, were reported as foreign born (United State Census Bureau, 2016). Passel and Cohn (2008) estimate by 2050, one in five people in the United States will be an immigrant.

With this change in demographics, there has been a change in the types of students in classrooms. As of 2017, the California Department of Education indicated only 23.6% of students enrolled in public schools were white, with Hispanic or Latino students comprising the majority (54.2%). Utah's public school were comprised of mostly white students (75%) with 17% of students identifying as Hispanic or Latino in 2016 (Utah State Board of Education, 2017). While these numbers did not reflect the same demographics of students in California, they did indicate a similar change in demographic profile when compared to percentages in 2005 where white students made up 83% of public school students and Hispanic or Latino students made up 11% (Utah State Board of Education, 2006).

In reference to changing demographics, Howard (2010) stated “one of the primary challenges for educators is directly tied to the growing schism between teachers and students” (pp. 41-42), which is linked to educational inequity. Ensuring teachers have rich global perspectives, which focus on intrapersonal factors, may aid in providing a teaching force able to have social empathy for others as well as be able to undertake creating culturally sensitive learning environments to meet the diverse needs of our varied student populations.

Teacher Passion

Palmer said, “We became teachers for reasons of the heart, animated by a passion for some subject and for helping people to learn” (2010, p. 17). Passion is defined as “a strong inclination or desire towards an activity that one likes and finds important and in which one invests time and energy” (Carbonneau et al., 2008, p.978). Teachers who are passionate are committed to engaging in the active development of their students’ moral and intellectual growth (Mart 2013). Fried (2001) described three areas teacher passion can be observed: (a) their subject area, (b) world events, and (c) children. Teacher commitment can also be seen as multidimensional with some level of commitment under the influence of external factors such as the school, career continuance, and professional knowledge base (Elliott & Crosswell, 2001).

Vallerand et al. (2003) coined the idea of dualistic passion comprised of two constructs: (a) harmonious passion, and (b) obsessive passion. Harmonious passion “results from autonomous internalization of the activity into the person’s identity” while obsessive passion “results from controlled internalization of the activity into

one's identity" (Vallerand et al., 2003, p. 757). Literature revealed harmonious passion is linked to commitment and longevity within the profession of teaching (Castillo, Álvarez, Estevan, Queralt, Molina-García, 2017; Moé, 2016) while obsessive passion had a high correlation with teacher burnout (Castillo et al., 2017). Although, Caudroit, Boiché, Stephan, Le Scanff, and Trouilloud (2011) found teachers expressing high levels of obsessive passion were willing to invest more time at work. Further, Castillo et al. (2017) looked at the impacts of transformational teaching on the dualistic passion constructs. Transformational teaching, comprised of teaching using idealized influence, or modeling, inspirational motivation, individual consideration to students, and intellectual stimulation; when transformational teaching is used, "the consequences of obsessive passion are cancelled out" (Castillo, et al., 2017, p. 59). Dualistic passion has also been discussed in terms of psychological investment (Fernet, Lavigne, Vallerand, & Austin, 2014). From the standpoint of dualistic passion and psychological investment being used to predict burnout in teachers, it was noted "in order to burnout, one must first be on fire" (p. 283) implying both dualistic passion constructs will only truly predict stress levels when psychological investment in the teaching career was present in the first place (Fernet et al., 2014).

An additional description of passion is that of aesthetic dimension. Hobbs' (2012) used aesthetic dimension to describe passion in reference to content knowledge where having an aesthetic appreciation for the beauty of the content would increase teacher passion thus impact student engagement in the subject matter. Hobbs (2012) said, "...professional development and teacher development are dealing with not only

issues of content and pedagogy, but also issues of identity, passion and seduction” (p. 727). The idea of passion can also be found overlapping with the concept of teacher heart. But what does this passion look like in our teachers?

Benekos (2016) asked university faculty recipients of teaching excellence awards to identify qualities that make a good teacher. It was found the qualities used to describe good teachers were largely personal qualities, such as passion and energy, as opposed to pedagogical attributes. When not discerning between personal and pedagogical domains, passion was the most frequent response. Fried (2001) said, when describing what makes a great teacher, “This caring about ideas and values, this fascination with the potential for growth within people, this fervor about doing things well and striving for excellence” (p. 54). Mart (2013) goes on to say:

Passionate teachers are those who make great changes in our lives. Their beliefs and vigorous actions make us realize our inner values and bewitch us. Passion contributes to teacher’s motivation and performance. Passionate teachers have an effect on student achievement. There is a strong correlation between passionate teaching and successful student learning. Commitment, a sense of adherence, is a key factor that influences learning process of students. (p. 441)

Other characteristics of passionate teachers included those who like working with young people, those who care about students, those who are aware of issues in the world and how they impact their classroom, those who take risks, and those who take their job as a teacher seriously (Fried, 2001). A qualitative study by Phelps and

Benson (2012), asked teachers to describe what sustained passion looked like in a teacher by using their administrators as models. Positive attitudes, willingness to accept change, and strong relationships with parents and students were themes which emerged (Phelps & Benson, 2012). This linkage with younger teachers and older teachers was reiterated by Santoro, Pietsch, and Borg (2012) who found a strong mentorship paradigm between veteran teachers and young teachers. While the study did focus on pre-service teachers in regard to mentees, the veteran teachers “expressions of continuing and passionate commitment to teaching” was prevalent throughout the interviews (Santoro et al., 2012, p. 592). Additional insights into sustained passion in the career of teaching were presented by Rampa (2014) where it was suggested passion is sustained through professional development, cluster meetings, and curriculum stability. Ultimately, environmental factors were identified as having the greatest negative impact on sustaining teacher passion throughout a career (Rampa, 2014). Time, paperwork, and parental expectations have also been linked to decreased passion over the career of a teacher (Phelps & Benson, 2012).

The literature revealed teacher passion impacts longevity in the career; even concerning the different constructs of passion (ie: dualistic, aesthetic, and psychological investment). There is especially little literature available in regard to second stage teachers and teacher passion. However, an underlying theme of the importance of professional development in relation to teacher passion and teacher commitment does appear to be a relevant topic to consider studying. As Rampa (2014) said, “To this end, lifelong learning nurtures professional dialogue, and reflective

practice ensures continued growth among teachers to make a difference in the lives and achievement of learners and contribute to community advancement” (p. 401).

Professional Development

Adults function differently than children in regard to learning. Knowles (1975) said adult learners are independent, have a wealth of experiences, require pragmatic learning opportunities, and are working toward reaching their maximum potential through learning experiences. Thus, educational programs for adults should differ from the planning of educational programs for students.

Professional development is a “dynamic and highly personal endeavor” (Guskey & Huberman, 1995, p. 7). The process of professional development is (a) intentional, (b) ongoing, and (c) systematic, while not seeking to find flaw, but to build upon strength (Guskey, 2000). The literature revealed a history of negativity surrounding professional development in regard to its purpose and effectiveness, as well as a need to focus professional development programs on the career phase of the teacher. Professional development is critical to the enhancement of our teachers, our students, and our educational system as a whole. Those involved in the production of comprehensive professional development delivery mechanisms must recognize “teacher education does not end with the receipt of a degree and a teaching license, nor is teacher education the same for teachers of all levels of experience and expertise” (Fessler & Christensen, 1992, p. 1).

The necessity and effectiveness of professional development is disputable. Many teachers and administrators acknowledge the accrual of post-baccalaureate

credits and additional certifications being the focus (Monahan, 1996). Meanwhile, only 13% of administrators and 6% of educators “reported that their professional development objectives were to remain current in the field or to increase their own professional growth” (Monahan, 1996, p. 44). Administrative decisions, the notion of “fixing” broken teachers, lack of ownership of the process of creating professional development, unrealistic expectations, lack of variety, inaccessibility, standardized approaches, and lack of evaluation negatively impact the delivery of professional development (Diaz-Maggioli, 2004). Teachers, regularly imply previous professional development plays little role in their daily obligations (Guskey, 2000). Professional development programs are sometimes developed with little attention to research-based practices and emphasis on trendy yet impractical applications difficult to implement (Guskey 1992, 1996, 2000).

Further, barriers exist preventing the useful implementation of professional development. Content restrictions, teacher release time, school/district factors, and costs can create difficulty when planning appropriate professional development for teachers who differ in experience level and content delivery areas (Kedzior & Fitfield, 2004). Despite barriers and the negative stigma, professional development has still been linked to increased teacher effectiveness and teacher retention, regardless of subject area, grade level, or country (Moore & Swan, 2008).

In addition to negative viewpoints of professional development, literature revealed the teacher career cycle is significant in designing meaningful professional development programs. Touchstone (2015) conducted a Delphi study to identify the

professional development needs of beginning teachers (0-5 years of teaching experience) of SBAE in Idaho in the hopes of purposeful “long term professional development planning” (p. 170). Workload, classroom management, and funding sources were identified as critical areas of need (Touchstone, 2015). In a study of Utah teachers of SBAE, Sorensen, Tarpley, and Warnick (2010) utilized the Borich needs assessment model to determine the importance of specific professional development topics. Utilizing the community, development of supervised agricultural experience (SAE), FFA proficiency award applications, FFA recruitment, and the instruction of differently abled students were identified as the top five areas of concerns of participants (Sorensen et al., 2010). Similarly, Sorensen, Lambert, and McKim (2014) used the same assessment model to identify the professional development needs of Oregon teachers of SBAE by career phase. However, the career phases identified were only induction (0-5 years of experience) and non-induction (6+ years of experience) providing no differentiation after the induction phase.

Gender

Agricultural education has changed in the past 20 years, particularly concerning the gender of its teachers. Gender has seen the greatest shift as a demographic. In 2000, Camp reported 41% of newly credentialed agriculture teachers in the United States were female. In 2017, Smith, Lawver, and Foster reported the proportion of newly credentialed agriculture teachers who were female was 69%.

Sorensen, McKim, and Velez (2016) conducted a national study to look at teacher turnover by gender. Female teachers of SBAE were found to have slightly

higher turnover rates than males. In Georgia, females were significantly more likely to leave teaching early or to leave the profession for a period of time and then return (Tippens, Ricketts, Morgan, Navarro, & Flanders, 2013).

A national study by Sorensen, McKim, and Velez (2017) indicated statistically significant higher salaries among male teachers of SBAE with no significant difference in the number of hours worked by gender. Additionally, a study of Texas agriculture teachers found male teachers of SBAE tend to spend more time at work while their female counterparts spend more time with family (Hainline, Ulmer, Ritz, Burris, & Gibson, 2015). These differences allude to potential disparities in professional commitment between the two genders, which may influence professional development programming.

THEORETICAL AND CONCEPTUAL FRAMEWORKS

Theoretical Framework

The theoretical framework for this study was built on the work of Guskey's model of teacher change about teacher professional development. Guskey (2002) said "High-quality professional development is a central component in nearly every modern proposal for improving education" (p. 381). Generally, professional development has focused on the end result of improving student learning, but Guskey (2000) offered an alternative model (Figure 2.1) of teacher change which suggested the ultimate goal of professional development is change in teachers' beliefs and attitudes.

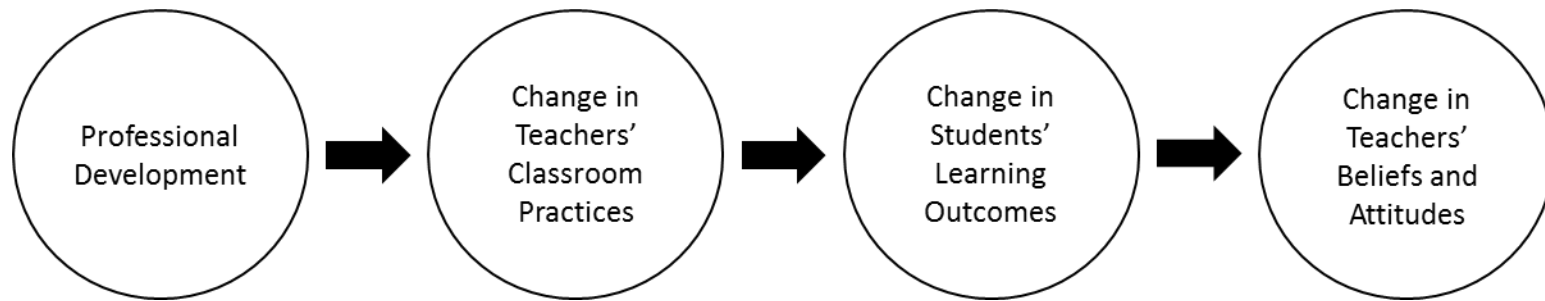


Figure 2.1. Guskey's (2000) model of teacher change describing the end result of effective professional development as a change in teachers' beliefs and attitudes.

The model of teacher change (Guskey, 2002) is testable, linear, causal in nature, and focuses on the meso, or “teacher in the context of a professional development programme or experience and in the context of their school or setting,” (Boylan, Coldwell, Maxwell, & Jordan, 2018, p. 128). The philosophical underpinnings of the teacher change model are sociologically positivistic, realistic, and empirical where there are mechanisms capable of producing social irregularities which can be seen (Boylan et al., 2018).

Quantitative research by Zambak, Alston, Marshall, and Tyminski (2017) revealed increases in belief of content self-efficacy in reference to inquiry based learning professional development on science teachers when using the model of teacher change. Hodges, Kulinna, Lee, and Kwon (2017) also witnessed change using the model of teacher change (2002) with physical education teachers in regard to health-related fitness knowledge. Yet, Zambak et al. (2017) and Hodges et al. (2017) both concluded teacher change is complex to measure. However, the model of teacher change (Guskey, 2002) is still a valuable tool, which has positive impacts in the context of professional development.

Professional development programs which embrace this alternative model tend to gain greater “acceptance, commitment, and enthusiasm” from teachers and administrators before information gained is applied (Guskey, 2002, p. 383). Guskey’s (2002) model of teacher change focuses on the shift in teacher paradigms as opposed to the professional development itself, we can use the model to illustrate movement, which may result in a change of teacher beliefs (Guskey, 2002). For the intents and

purposes of this study, the researchers hoped to use the framework to indicate whether or not second stage teachers of SBAE from the Western United States experienced change regarding global perspectives, passion to teach, and commitment to the profession of teaching.

Conceptual Framework

This study's conceptual framework was built upon the PPM framework of migration contributed to by Bogue (1969, 1977), Lee (1966), and Moon (1995). Bogue (push-pull), Lee (mooring), and Moon (mooring) dealt with migration of human populations.

Migration typically involves the movement of people from one geographic area to another. On the other hand, career change involves the movement of individuals from one career to another. While career change may not involve the physical movement of people, it often means a loss of investment in years of discipline and psychologically changing one's prior professional identity to another. (Fu, 2011, p. 280)

PPM suggests push factors (stressors), pull factors (attractors), and mooring factors (variables halting or facilitating movement) impact a migrant's decision to move (Bansal et al., 2005). Mooring factors may often be referred to as *anchors* in the literature and act as items, which tie a person to a specific location (Stimson & McRea, 2004). "Anchors represent a reverse concept, being conditions or circumstances that can be 'pulled up' at one location and 'set down' in another to

provide stability (for example, club membership, occupational and business skills, transfer payments, and support services)” (Stimson & McRae, 2004, p. 1456).

This study develops a conceptual model based on PPM framework (Figure 2.2) in relation to professional commitment. The factors which comprise the PPM framework were first used to describe migration of populations (Bogue, 1969, 1977; Lee, 1966; Moon, 1995) and later used to describe career commitment among internet technology professionals (Fu, 2011). Push factors include professional satisfaction and threat of professional obsolescence. Pull factors are the availability of professional alternatives. Mooring, or anchor, factors encompass professional self-efficacy and professional investment.

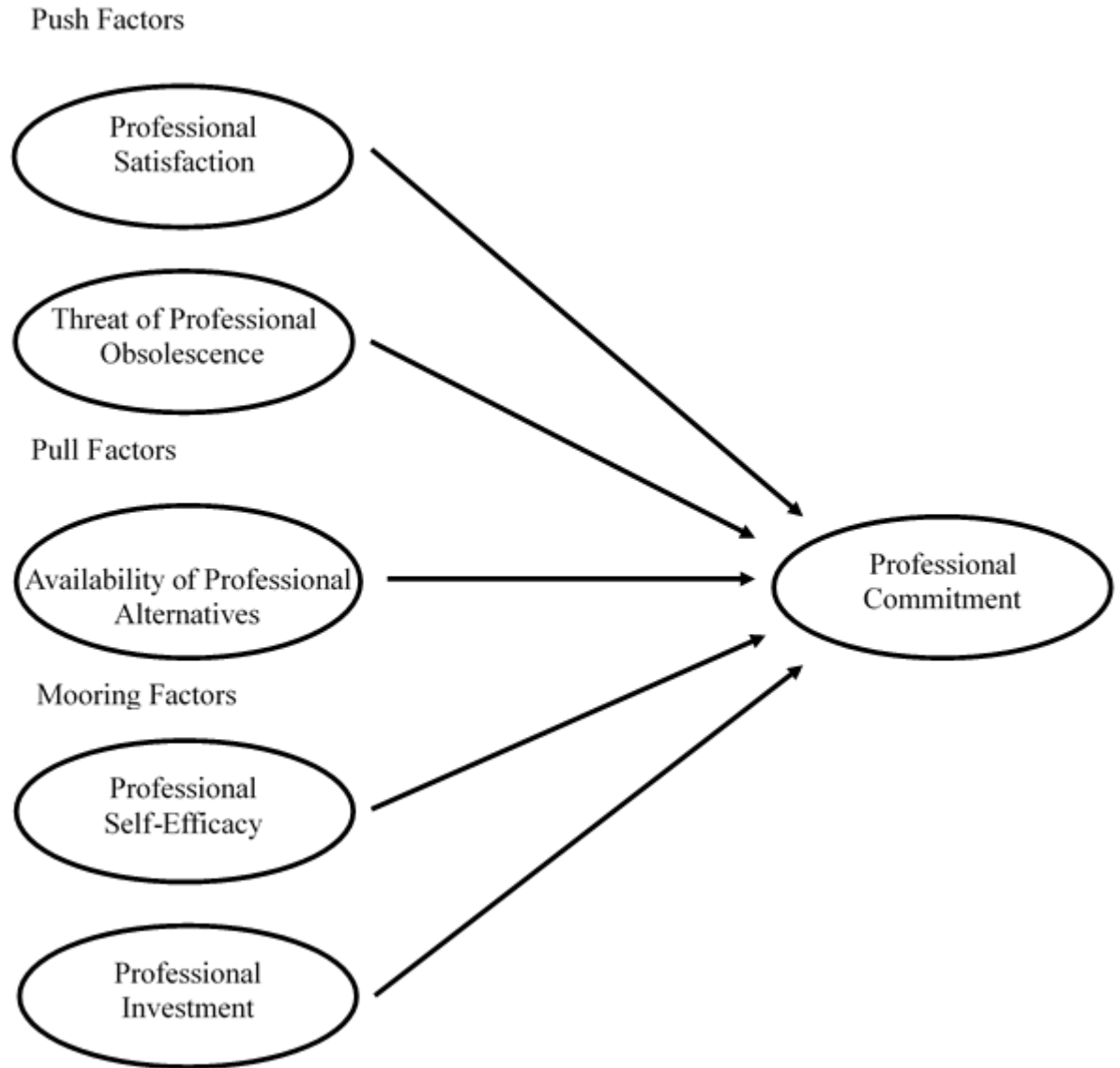


Figure 2.2. Push-Pull-Mooring conceptual framework. Adapted from “Understanding Career Commitment of IT Professionals: Perspectives of Push-Pull-Mooring framework and investment model,” by Fu, J., 2011, *International Journal of Information Management*, 31, p. 282.

SUMMARY

The idea of the second stage teacher is new to agricultural education and is generally a vulnerable and overlooked group with concern to specific professional development delivery. There is an abundance of research surrounding the effectiveness of general professional development and how international experiences alter the global perspectives of undergraduate and university faculty—but not in the frame of using international experiences as a form of intensive professional development for teachers of second stage teachers of SBAE. McKim et al. (2017) called for more opportunity for professional development over the span of teachers careers, not just specific to early-career teachers, as a potential mitigating factor of mid-career professional commitment loss. Further, it is evident teacher passion impacts student learning and, in part, teacher commitment. However, the relationship between professional development, global perspectives, and teacher passion has yet to be explored or linked holistically to professional commitment and teacher change. The additional factor of gender requires further exploration when researching these constructs as differences have been found before. Further, the concept of PPM may help describe specific factors which may weigh down or draw away individuals from the profession of SBAE. Exploring the characteristics of our second stage teacher population of teachers of SBAE may shed light on elements impacting teacher retention.

CHAPTER III

METHODS

Purpose and Objectives

The purpose of this study was to describe the professional commitment, global perspectives, and push pull mooring (PPM) factors of second stage teachers of school based agricultural education (SBAE) from two western states. The objectives for this study were:

1. Describe demographics of interest of second stage teachers of SBAE in the Western United States.
2. Describe global perspectives, teacher passion, and PPM factors of second stage teachers of SBAE in the Western United States.
3. Determine the amount of variance in professional commitment, which can be predicted by a linear combination of global perspectives, teacher passion, and gender.
4. Compare factors, which may influence second stage teachers of SBAE in the Western United States to self-select to participate in an intensive professional development experience.
5. Compare the global perspectives, passion for teaching, and professional commitment of second stage teachers before and after an intensive professional development experience.

Design

This quantitative, non-experimental study was conducted in three sections; all of which employed survey research design allowing data to be collected simultaneously from a large number of participants (Fraenkel, Wallen, & Hyun, 2012). The first section included descriptive-correlational design (Fraenkel et al., 2012). Descriptive studies seek to document an interest (Fraenkel et al., 2012). In this study, the researchers wanted to document the global perspectives, teacher passion, PPM factors, and demographic characteristics of interest of second stage teachers of SBAE. Further, the researchers used correlational design to explore the relationship between global perspectives, teacher passion, professional commitment, and gender without attempting to influence the variables (Fraenkel et al., 2012). A questionnaire was distributed to all second stage teachers of SBAE in California and Utah, known as the pretest. Research objectives one, two, and three were addressed for this part of the study.

The second section of this study used static-group comparison and ex post facto design as there were two established groups already intact (Fraenkel et al., 2012). The two groups examined were within the population of second stage teachers: 1) Those who participated in the Summer 2018 intensive professional development experience held in Ecuador for 10 days, and 2) Those who did not choose to participate. According to Fraenkel et al. (2012), “In casual-comparative research, investigators attempt to determine the cause or consequence of differences that already exist between or among groups of individuals” (p. 366). The researchers sought to

understand if there were any differences in the global perspectives, teacher passion, or professional commitment between the two groups, which addressed research objective four.

The third section of this study included static-group pretest-posttest and correlational design (Fraenkel et al., 2012). Here, the static-group pretest-posttest design was used as only the pretest was given to both groups: 1) Those who participated in the Summer 2018 intensive professional development experience held in Ecuador for 10 days, and 2) Those who did not choose to participate (Fraenkel et al., 2012). A follow up posttest was given to the individuals who chose to participate in the event in Ecuador. Pretest and posttest data was compared to determine if there were any relationships impacting global perspectives, teacher passion, or PPM factors because of the experience. This tied to objective five.

Initial Institutional Review Board (IRB) approval for the descriptive portion of this study was received from Texas Tech University on October 25, 2017 and can be found in Appendix A. This initial approval included only the population of California second stage teachers if SBAE. A modification was made, to include second stage teachers of SBAE from Utah, and approved on February 19, 2018 (Appendix B). IRB approval for the ex post facto and correlational segments was received on March 19, 2018 and can be found in Appendix C. Due to the joint nature of the lead researcher's degree program, separate IRB reciprocity was sought with the partnering institution of Texas A&M University. This approval was given to part one on April 16, 2018 (Appendix D) and to part two on April 13, 2018 (Appendix E).

Population and Sample

The targeted population was second stage teachers of SBAE in California and Utah. These teachers were identified as those who started teaching SBAE in Fall 2008 up and through Fall 2014, and were still currently teaching SBAE during the 2017-2018 school year. A frame was obtained from the California Agricultural Teachers' Association (CATA) and the Utah Association of Agricultural Educators (UAAE) of 286 teachers. After checking for validity of email addresses and verifying second stage status, the frame was reduced to 265 second stage teachers of SBAE in California and Utah.

As the goal of the research was to reach an entire homogenous group of second stage teachers of SBAE in California and Utah, selection bias was reduced and generalizability was increased reducing external threats to validity. The self-selection process for the trip may have created some bias, as did the limitations to the number of those who chose to participate, however all members of the defined population had the ability to seek participation.

The total number of responses received was 116, resulting in a response rate of 43.8%. Since a minimum threshold of an 85% response rate was not achieved, the researchers employed the methodology of controlling nonresponse error recommended by Lindner, Murphy, and Briers (2001). Late respondents were defined as the last 50% of respondents to ensure a minimum late respondent number of 30. Global perspectives, teacher passion, and professional commitment were compared using

independent *t*-tests with an alpha value established at .05 *a priori*. Independent *t*-tests were calculated on global perspectives, teacher passion, and professional commitment to account for non-response error by comparing early and late respondents (Table 3.1). No significant differences ($p > .05$) were found, thus the researchers were comfortable with generalizing the responses for the rest of the population (Lindner, Murphy, & Briers, 2001).

Table 3.1

Comparison of Early and Late Respondents Regarding Global Perspectives, Teacher Passion, and Professional Commitment (N = 116)

Variable	<u>Early Respondents</u>		<u>Late Respondents</u>		<i>t</i> -test	Sig.
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>		
Global Perspectives (<i>n</i> = 110)	3.61	.28	3.58	.30	.56	.58
Teacher Passion (<i>n</i> = 109)	7.03	.77	7.07	.11	-.28	.78
Professional Commitment (<i>n</i> = 116)	4.56	.56	4.64	.54	-.78	.44

Note. Differences in *n* reflect missing data

Ethnicity data collected revealed that the majority of second stage teachers of SBAE were white (Table 3.2). No participants identified as Black or African American.

Table 3.2

*Demographics of Second Stage Teachers of SBAE from the Western United States
(N = 116)*

Ethnicity	<i>f</i>	%
White (non-Hispanic)	94	85.5
Hispanic or Latino	7	6.0
Other	7	6.0
Asian	1	0.9
Native Hawaiian or Pacific Islander	1	0.9

Note. Mode = White

Geographic descriptive characteristics were also collected (Table 3.3). Ninety-eight teachers were from California, (90.7%) while 10 were from Utah (9.3%). Most taught in the San Joaquin Region of California (n = 35, 32.4%). Three geographical regions in Utah were not represented: Area 2, Area 7, and Area 9.

Table 3.3

Geographic Characteristics Second Stage Teachers of SBAE from the Western United States (N = 116)

Attribute	<i>f</i>	%
State (<i>n</i> = 108) ^a		
California	98	90.7
Utah	10	9.3
Geographic Region (<i>n</i> = 108) ^b		
CA-Central	21	19.4
CA-North Coast	8	7.4
CA-San Joaquin	35	32.4
CA- South Coast	14	13.0
CA-Southern	12	11.1
CA-Superior	8	7.4
Utah-Area 1	1	0.9
Utah-Area 3	1	0.9
Utah-Area 4	1	0.9
Utah-Area 5	1	0.9
Utah-Area 6	1	0.9
Utah-Area 8	2	1.9
Utah-Area 10	3	2.8

Note. ^a Mode = California, ^b Mode = CA-San Joaquin

Recognizing the disparity between the numbers of respondents from each state, the researchers conducted an independent *t*-test of global perspectives, teacher passion, and professional commitment where a dichotomous dummy code was created using “0” equals California and “1” equals Utah. At an alpha level of .05 *a priori*, there was a significant difference in summated teacher passion by state (Table 3.4). Thus, comparisons of teacher passion scores should be interpreted with caution (Field, 2013).

Table 3.4

Comparison of California and Utah Respondents Regarding Global Perspectives, Teacher Passion, and Professional Commitment (N = 116)

Variable	California		Utah		<i>t</i> -test	Sig.
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>		
Global Perspectives ^a	3.62	.28	3.46	.36	1.72	.09
Teacher Passion ^b	7.10	.08	6.60	.41	2.03	.05*
Professional Commitment ^c	4.60	.55	4.83	.58	-1.33	.19

Note. ^a Scale of 1 = “strongly agree” and 5 = “strongly disagree,” ^b Scale of 1 = “none/nothing” and 9 = “a great deal,” ^c Scale of 1 = “strongly disagree” and 7 = “strongly agree”

**p* < .05

Pathway characteristics, in Table 3.5, indicated the majority of teachers taught in the agriscience pathway (*n* = 53, 48.6%). No teacher indicated the Agribusiness pathway as a primary area of teaching.

Table 3.5

Pathway Characteristics of Second Stage Teachers of SBAE from the Western United States (N = 116)

Primary Pathway Taught (<i>n</i> = 109)	<i>f</i>	%
Agriscience	53	48.6
Agricultural Mechanics	24	22.0
Animal Science	18	16.5
Ornamental Horticulture	10	9.2
Plant Science	3	2.8
Forestry & Natural Resources	1	0.9

Note. Mode = Agriscience

Characteristics of the education and teaching credentials of participants were collected (Table 3.6). The bulk of participants had an undergraduate degree in Agricultural Science-Teacher prep (*n* = 83, 76.1%). Other majors not listed included Agricultural Business, Dairy Science, Wine and Viticulture, General Agricultural Studies, Interdisciplinary Studies, International Agricultural Development, Natural Resources, and Wildlife Biology. Most second stage teachers received their teaching credentials from CSU, Cal Poly-San Luis Obispo (*n* = 35, 32.1%).

Table 3.6

Educational Characteristics of Second Stage Teachers of SBAE from the Western United States (N = 116)

Attribute	<i>f</i>	%
Undergraduate Degree (<i>n</i> = 109) ^a		
Agricultural Science (Teacher Prep)	83	76.1
Other	11	10.1
Animal Science	9	8.3
Agricultural Systems Management/Agricultural Engineering	4	3.7
Horticulture & Crop Science	2	1.8
Credentialing Institution (<i>n</i> = 109) ^b		
CSU, Cal Poly-San Luis Obispo	35	32.1
CSU, Chico	26	23.9
CSU, Fresno	23	21.1
Other	10	9.2
Utah State University	8	7.3
UC Davis	4	3.7
CSU, Cal Poly-Pomona	3	2.8
Credentials Held (<i>n</i> = 109) ^c		
Single Subject-Agriculture	97	89.9
Specialist-Agriculture	79	72.5
Other	14	12.8
Secondary Education License with Agriculture Endorsement	8	7.3
Designated Subject-Agriculture	7	6.0

Note. ^a Mode = Agricultural Science (Teacher Prep), ^b Mode = CSU, Cal Poly-San Luis Obispo, ^c Mode = Single Subject-Agriculture

Just as undergraduate degree titles differ from program to program, credentialing rules vary from state to state. It should also be noted the traditional California pathway to teacher credentialing calls for two credentials: The Single Subject-Agriculture and the Specialist-Agriculture. However, many teachers in California may choose obtain a Designated Subject-Agriculture credential and then later add the Specialist-Agriculture credential. Utah requires teachers to obtain a Secondary Education License with an Agriculture Endorsement as its credentialing process. In this study, 89.9% had a Single Subject-Agriculture credential, 72.5% had a Specialist-Agriculture credential, 6% had a Designated Subject-Agriculture credential, and 7.3% had their Secondary Education License with an Agriculture Endorsement. Other types of credentials noted were Administrative credentials, CTE General credentials, additional science credential endorsements, CTE Manufacturing credentials, and Multiple Subject credentials

Missing Data

Fourteen responses were incomplete, but did have responses to at least one whole construct or demographic information completed, so they were included. Table 3.7 indicates the number of complete responses, by variable of interest, provided during survey administration.

Table 3.7

Number of Complete Survey Responses by Variable of Interest (N=116)

Variable	<i>n</i>
Age	108
Gender	110
Global Perspectives	110
Number of Years Teaching	116
Professional Commitment	116
Teacher Passion	109

To address missing data among respondents, the researchers followed the recommendation of Tabachnick and Fidell (2007). The researchers created a dichotomous dummy where “0” indicated an incomplete questionnaire and “1” indicated a complete questionnaire. Independent samples *t*-tests of global perspectives, teacher passion, and professional commitment indicated no significant differences ($p > .05$) between the two groups (incomplete and complete) at an alpha level of .05 *a priori* (Table 3.8). This indicated the missing data were random, not systematic. Further, a sample regression analysis was conducted where the incomplete responses showed very little variation from the same analysis conducted without the incomplete responses; the researchers were confident in the results and chose to leave the incomplete responses in the data.

Table 3.8

Comparison of Incomplete Responses Regarding Global Perspectives, Teacher Passion, and Professional Commitment (N = 116)

Variable	<u>Complete</u>		<u>Incomplete</u>		t-test	Sig.
	M	SD	M	SD		
Global Perspectives ^a	3.61	.26	3.54	.42	.91	.37
Teacher Passion ^b	7.04	.78	7.08	.44	-.153	.88
Professional Commitment ^c	4.60	.55	4.58	.55	.19	.85

Note. ^a Scale of 1 = “strongly agree” and 5 = “strongly disagree,” ^b Scale of 1 = “none/nothing” and 9 = “a great deal,” ^c Scale of 1 = “strongly disagree” and 7 = “strongly agree”

Instrumentation

Census data were collected using a questionnaire comprised of demographic questions and the three instruments used to measure global perspectives, teacher passion, and PPM factors (Appendix F). Related questions were grouped together to facilitate ease of answering for participants (Dillman, Smyth, & Christain, 2014). Additional Tailored Design Method strategies were used to create the instrument including the use of an initial filter question to verify eligibility, mobile browser capability, and participant option to skip questions and go back within the survey (Dillman et al., 2014).

The Global Perspectives Inventory (GPI) was used to measure individuals’ experiences in the development of a global perspective using three dimensions or constructs: Cognitive, Intrapersonal, and Interpersonal (Research Institute for Studies in Education, 2017b). For this study, the 35 item general form of the GPI was used

where there were 12 items for the Cognitive domain, 11 items for Interpersonal, and 9 items for Intrapersonal (Research Institute for Studies in Education, 2017b). Three items did not load into any of the three constructs, resulting in 32 items used to create the summated global perspective score.

The GPI (Appendix G) used a five-point Likert scale with anchors between “1 = strongly agree” and “5 = strongly disagree.” To ensure validity, principal component analysis using Varimax rotation, as well as principal axis factoring with Varimax and Promax, delivered similar results (Research Institute for Studies in Education, 2017b). Scale item reliability values ranged between .63 and .89 based on data collected from 3619 participants who have completed the general form since July of 2015 (Research Institute for Studies in Education, 2017b).

The Pulse of a Teacher scale used 20 items with a 9-point Likert scale with the following anchors: 1 = “none/nothing”, 3 = “very little”, 5 = “some”, 7 = “quite a bit”, and 9 = “a great deal”. These items were reported as a single summated score. The instrument was previously validated for face and content validity by a panel of six teacher educators from three universities (Swan, 2005) with reliability tests indicating alpha levels of .77, or acceptable (Cronbach, 1951). The instrument (Appendix H) seeks to identify “level of care and enthusiasm in the classroom” (Swan, 2005, p. 93).

The PPM questionnaire (Appendix I), by Fu (2011), was used to address each of the PPM framework items within separate sub sections as follows: Push (14 items), Pull (3 items), Mooring (10 items), and Professional Commitment (9 items). These items used seven-point Likert scale with ratings between 1 = “strongly disagree” and 7

= “strongly agree.” The term “career” was modified on the original instrument to “professional” to reflect the nature of teaching being a profession rather than a career (Bergman et al., 2000; Giffords, 2009; Hall, 1971; Teng, Shyu, & Chang, 2007). For the intents of this research, individual constructs (Push, Pull, Mooring, and Professional Commitment) were reported as summated scores.

Sub-constructs are embedded within each of these constructs and are the source of validity for the instrument (Fu, 2011). Within the construct of Push are the sub-constructs of professional satisfaction and threat of professional obsolescence. Professional satisfaction uses the five-item career satisfaction scale, validated and deemed reliable by Greenhaus, Parasuraman, and Wormley (1990) using factor analysis with Varimax rotation resulting in an acceptable alpha level of .88 (Cronbach, 1951). Threat of professional obsolescence items were validated by Kaufman (1989) through a cross-validation process involving the peer and self-assessment of technical professionals. Results were adequate at an alpha level of .76 (Cronbach, 1951).

Pull has no specific sub-constructs, but is based off Dam’s (2005) investigation of a career investment model. Principal component analysis with Varimax rotation was used to validate the instrument, finding a reliability coefficient of an acceptable (Cronbach, 1951) alpha equaling .75 for the career alternative items (Dam, 2005).

Mooring sub-constructs included career investment and professional self-efficacy. Career investment items were also validated and found reliable via Dam (2005). Professional self-efficacy used Kossek, Roberts, Fisher, and Demarr’s (1998) career self-efficacy scales developed using principle components extraction and

varimax rotation. Fu (2011) conducted a pilot study with the self-efficacy items finding acceptable reliability (Cronbach, 1951) of .89.

Professional Commitment is comprised of professional identity, professional planning, and professional resilience sub-constructs. These items were based off the work of Carson and Bedeian (1994), validated by Kidd and Green (2006). Kidd and Green (2006) used maximum likelihood factor analysis with Varimax rotation to establish validity, but did not report reliability coefficients. However, Carson and Bedeian (1994) found alpha levels for commitment at .81 during their original construction of the instrument.

According to the recommendation of Dillman et al. (2014) demographic questions were placed at the end of the instrument to increase established rapport with participants in the hope of increasing response rates. The following demographic information was collected: Number of years teaching, gender, ethnicity, age, state affiliation, university where credentials were obtained, name of undergraduate degree, types of credentials held, region/area currently teaching in, and primary Career and Technical Education (CTE) pathway area teaching. Upon reviewing the literature, number of years teaching, gender, and age were identified as demographic variables of interest to the researchers.

A pilot study with 13 student teachers from Cal Poly State University, San Luis Obispo was held to detect any issues with the proposed instrument prior to carrying out the study (Fraenkel et al., 2012). The pilot instrument, which included demographic questions, the GPI, the teacher passion scale, and the PPM instrument

was distributed via a Qualtrics link. Volunteers for the pilot had one week to complete the instrument and were asked to provide feedback on the ease of using the instrument. One participant responded with feedback regarding scaling of one section of the instrument. The scales were reviewed and corrections made, which resulted in the final instrument for data collection.

The instrument was distributed to the population of participants via email using Qualtrics. In regard to response rates, Dillman et al. (2014) identified early morning as the best time of distribution. No day of the week has been established as resulting in a significantly greater response rate, but the schedules of participants was considered when selecting the date of distribution (Dillman et al., 2014; Shinn, Baker & Briers, 2007).

In order to drive response rates during data collection, four points of contact were initiated over the course of four weeks and it was the intention to capitalize on the pre-existing relationship between a member of the research team and the participants (Dillman et al., 2014). The pretest link was initially distributed April 29, 2018 at 5AM Pacific Daylight Time (PDT) and 6AM Mountain Daylight Time (MDT) to all second stage teachers of SBAE ($N = 265$) in California and Utah. Reminders were sent at 5AM PDT and 6AM MDT on May 15, May 21, and May 29, 2018. The instrument was closed at 11:59PM PDT on June 4, 2018.

At any point in time, participants involved in the study were allowed to discontinue their participation without penalty. All respondents were guaranteed anonymity. Survey results were stored on a password protected computer and only the

researchers had access to the data. At the end of the survey, participants were asked if they wanted to participate in a drawing for a \$50 gift card to Staples. If they chose to do so, they were redirected to a different portion of the survey where a name and email address were collected for the drawing. The drawing was conducted in June.

The same instrument procedure, for the Qualtrics instrument, was used for the distribution of the pretest and posttest instrument to the group traveling to Ecuador. The pretest data was collected at the same time as the census to maintain the homogeneity of the population. The posttest link was distributed via email to all second stage SBAE teachers who participated in the intensive professional development event on July 23, 2018; approximately one week after returning from Ecuador. Distribution times were, again, 5AM PDT and 6AM MDT. Four points of contact were made as per Dillman et al. (2014). The survey closed at 11:59PM on August 8, 2018 with a 100% response rate.

Data Analysis

Data were analyzed using the Statistical Package for Social Sciences (SPSS). All data was imported from Qualtrics. Objective one dealt with describing variables of interest of the second stage teachers of SBAE in the Western United States. Demographic characteristics included number of years teaching, gender, and age. Measures of central tendency and variability were used to describe the population using frequencies, percentages, modes, means, and standard deviations as appropriate.

Objective two aimed at describing professional commitment, global perspectives, and teacher passion in the investigated population. Scale items were

summed by instrument and divided by the number of items on the instrument to generate a single score for each instrument. Measurements of central tendency including means, medians, and standard deviations were calculated for each instrument.

The third research objective looked to determine the amount of variance in professional commitment, which can be predicted by a linear combination of global perspectives, teacher passion, and gender. To do this, multiple linear regression was used to test the null hypothesis $H_0: R^2 = 0$, which suggested there would be no variance accounted for in professional commitment predicted by global perspectives, teacher passion, and gender. The model was found to be linear, constant, and normally distributed adding robustness to the classical assumptions of linearity, homoscedasticity, and normal distributed errors (Field, 2013). All predictor and outcome variable were of the appropriate type for the model.

A correlation matrix (Table 3.9) revealed no correlations above .80 (very high), thus multicollinearity was assumed as per Field (2013). Additional VIF and tolerance levels of collinearity statistics found no VIF greater than 10, and no tolerance levels below .2, thus multicollinearity was robust. There was a significant, low positive (Davis 1971) bi-variate correlation between teacher passion and global perspectives ($r = .26, p = .004$). Between teacher passion and professional commitment, there was a low negative (Davis, 1971) bivariate correlation ($r = -.16, p = .045$). The assumption of independent errors resulted in a Durbin-Watson value of

1.79, falling within the range of 1 and 3, thus the assumption for independent errors is robust and residuals are not highly correlated (Field, 2013).

Table 3.9

Descriptive Statistics and Relationships Between Professional Commitment, Global Perspectives, Teacher Passion, and Gender (n = 109)

Variables	Intercorrelations			Univariate Statistics	
	x ₁	x ₂	x ₃	\bar{x}	SD
Global Perspectives ^a (x ₁)	1.00	.26*	-.01	3.60	.29
Teacher Passion ^b (x ₂)	.26*	1.00	.04	7.05	.74
Gender ^c (x ₃)	-.01	.04	1.00		
Professional Commitment ^d (y)	-.08	-.16*	.02	4.60	.55

Note. ^a Scale of 1 = “strongly agree” and 5 = “strongly disagree,” ^b Scale of 1 = “none/nothing” and 9 = “a great deal,” ^c Coded 0 = “male” and 1 = “female,” ^d Scale of 1 = “strongly disagree” and 7 = “strongly agree”

*Signifies bi-variate correlations significant at $p < .05$

The fourth and fifth objectives of this study required the use of statistical analysis tools not frequently used within the scope of agricultural education. The researchers recognized the uneven group sizes ($n = 109$ and $n = 7$) between the those who traveled to Ecuador and those who did not, as well as the very small size of one group created violations for the assumptions of normality and homogeneity of variance. Considering these violations, non-parametric tests were used as per the recommendation of Field (2013). Nachar (2008) said the use of such tests does not imply a lack of parameters, but adds flexibility when assumptions cannot be met.

Both of the tests used transformed the data by assigning ranks to values thus minimizing the impact of outliers and abnormal distributions (Field, 2013). For both

objectives, when ranks occurred more than once as tied ranks, their ranks were averaged and used as the ranks for both scores. Thus if 2 items had a the same scores of 8 and were ranked 9th and 10th, an average would be calculated giving both items a rank of 9.5. After the assignment of ranks, the ranks were then summed and the appropriate test statistic and statistical power were calculated.

The fourth objective of this study compared factors, which may influence second stage teachers of SBAE in the Western United States to self-select to participate in an intensive professional development experience. The Mann Whitney U test was used as a non-parametric variant of the independent t -test (Field, 2013). The Mann Whitney U test has similar power to a t -test when used on Likert scale items and is recommended for groups of 5 to 20 (Nachar, 2008; de Winter & Dodou, 2010). For this test statistic, the ranks were summed and the U was calculated using the rank totals and group sizes (Field, 2013). Below is the equation for calculating U where n_1 and n_2 represent the size of each group and R_1 is the summed ranks for group 1:

$$U = n_1 n_2 + \frac{n_1(n_1 + 1)}{2} - R_1$$

Teachers who did not participate (coded 0) and those who did (coded 1) were compared using a Mann Whitney U test. Medians were reported as descriptive statistics. U and z -scores were used to test the hypothesis that distributions of those who participated and those who did not are identical, so there is a 50% probability that an observation from a value of global perspectives, teacher passion, or professional commitment randomly selected from one population exceeds an observation selected from the population. An alpha level of .05 was established *a priori* observing exact

asymptotic significance. The assumption of independents was robust as individuals could not be reported in more than one group. Rosenthal's (1991) methods used z -scores to calculate effect size estimates (r) and Cohens' d (1988, 1992) was used to interpret those r values (.2 = small, .5 = medium, and .8 = large).

The fifth and final research objective gave the researchers the opportunity to compare the global perspectives, passion for teaching, professional commitment, and change of second stage teachers before and after their intensive professional development experience. Due to the small number of participants ($N = 7$), the researchers elected to use the Wilcoxon Sign-Rank test as non-parametric equivalent of the dependent t -test.

Field (2013) outlines the process for conducting the Wilcoxon Sign-Rank test. The test statistic for this test is the T -statistic, which is calculated by assigning ranks to the data. Each rank is calculated by finding the difference between the pre and post values. These values are then assigned a rank value. As there could be negative or positive changes in ranked values, the ranks are added resulting in two T values: T_+ and T_- . To calculate significance, the mean of T and standard error of the mean of T are found using the following formulas:

$$\bar{T} = \frac{n(n+1)}{4}$$

$$SE_{\bar{T}} = \sqrt{\frac{n(n+1)(2n+1)}{24}}$$

For this study, SPSS was used to calculate the T -statistic based on pre and post data collected from the same participants. The researchers reported T and z -scores with

the corresponding p -values and effect sizes. This measure was repeated for global perspectives, passion for teaching, and professional commitment scales with significance established at .05 *a priori*. Cohen's d (1988, 1992) was used to interpret effect sizes where .2 = small, .5 = medium, and .8 = large.

CHAPTER IV

RESULTS

Purpose and Objectives

The purpose of this study was to describe the professional commitment, global perspectives, and push pull mooring (PPM) factors of second stage teachers of school based agricultural education (SBAE) from two western states. The objectives for this study were:

1. Describe demographics of interest of second stage teachers of SBAE in the Western United States.
2. Describe global perspectives, teacher passion, and PPM factors of second stage teachers of SBAE in the Western United States.
3. Determine the amount of variance in professional commitment, which can be predicted by a linear combination of global perspectives, teacher passion, and gender.
4. Compare factors, which may influence second stage teachers of SBAE in the Western United States to self-select to participate in an intensive professional development experience.
5. Compare the global perspectives, passion for teaching, and professional commitment of second stage teachers before and after an intensive professional development experience.

Objective One

Objective one asked the researchers to describe demographics of interest of second stage teachers of SBAE from the Western United States. Literature revealed gender, age, and number of years teaching to be of the greatest concern when discussing second stage teachers of SBAE. Results can be found in Table 4.1. Data regarding gender revealed the majority of second stage teachers were female ($n = 80$, 72.7%). While all teachers fell within the prescribed second stage time frame of 4-10 years teaching, the majority of them had been teaching for 5 years ($n = 23$, 19.8%). Responses concerning age indicated second stage teachers were between 25 and 59 years old. Most teachers were between 25 and 34 years old with a median age of 31. The mean age of second stage teachers of SBAE in California and Utah was 32.41 years ($SD = 5.78$).

Table 4.1

Demographics of Second Stage Teachers of SBAE from the Western United States (N = 116)

Demographic	<i>f</i>	%
Gender (<i>n</i> = 110) ^a		
Female	80	72.7
Male	30	27.3
Number of Years Teaching (<i>n</i> = 116) ^b		
Four	19	16.4
Five	23	19.8
Six	19	16.4
Seven	20	17.2
Eight	12	10.3
Nine	12	10.3
Ten	11	9.5
Age (<i>n</i> = 108) ^c		
25-34	89	82.4
35-44	14	13.0
45-54	3	2.8
55 and Over	2	1.9

Note. ^a Mode = Female, ^b Mode = Five, ^c Mode = 25-34, *M* = 32.41, *SD* = 5.78, *Mdn* = 31

Objective Two

Objective two asked the researchers to describe the professional commitment, global perspectives, and teacher passion of the investigated population. Table 4.2 shows participant summated global perspectives ($M = 3.60$, $SD = .29$) as well as global perspective scores by dimension. Analysis of the individual dimensions revealed the *Intrapersonal* dimension had the highest mean score ($M = 4.00$, $SD = .33$) while the *Cognitive* dimension had the lowest ($M = 3.27$, $SD = .33$).

Table 4.2

Description of Global Perspectives of Second Stage Teachers of SBAE with Dimensions (N = 110)

Item	<i>M</i>	<i>SD</i>
Summated Global Perspectives	3.60	.29
Intrapersonal	4.00	.33
Interpersonal	3.47	.32
Cognitive	3.27	.33

Note. Scale of 1 = “strongly agree” to 5 = “strongly disagree”

PPM factors were reported as scaled items and sub-scaled items (Table 4.3). Results indicated *Mooring* factors to be highest rated among second stage teachers of SBAE ($M = 5.67$, $SD = .51$) while *Push* factors were the lowest ($M = 4.26$, $SD = .66$). *Professional Commitment* revealed $M = 4.61$ ($SD = .54$) as a construct of interest.

Table 4.3

Description of Push Pull Mooring Factors of Second Stage Teachers of SBAE with Sub-Constructs (N = 116)

Item	<i>M</i>	<i>SD</i>
Push	4.26	.66
Professional Satisfaction	4.90	.94
Threat of Professional Obsolescence	3.85	.91
Pull	4.76	.75
Professional Alternatives	4.76	.75
Mooring	5.67	.51
Professional Self-Efficacy	5.68	.80
Professional Investment	5.67	.65
Professional Commitment	4.61	.54
Professional Identity	4.72	.49
Professional Planning	3.73	.75
Professional Resilience	5.37	1.32

Note. Scale of 1 = “strongly disagree” and 7 = “strongly agree.”

The Pulse of a Teacher scale was reported (Table 4.4) as a single summated score based off the 20-item the scale. Results indicated a mean rating of $M = 7.05$, $SD = .38$.

Table 4.4

Description of Teacher Passion Levels of Second Stage Teachers of SBAE (N = 109)

Item	<i>M</i>	<i>SD</i>
Teacher Passion	7.05	.74

Note. Scale of 1 = “none/nothing” and 9 = “a great deal”.

Objective Three

The third research objective asked to determine the amount of variance in professional commitment, which can be predicted by a linear combination of global perspectives, teacher passion, and gender. Table 4.5 indicated a linear combination of global perspectives, teacher passion, and gender explain 3% of the variance for professional commitment, $F(3, 105) = .711$. This was not a significant effect ($p = .37$), thus the null hypothesis was accepted.

Table 4.5

Regression Analysis Summary for Global Perspectives, Teacher Passion, and Gender Predicting Professional Commitment (N = 109)

Variables	<i>B</i>	<i>SE B</i>	β	<i>t</i>	<i>p</i>
Global Perspectives ^a	-.11	.20	-.06	-.59	.56
Teacher Passion ^b	-.12	.08	-.15	-1.54	.13
Gender ^c	.04	.12	.03	.33	.74

Note. $R^2 = .03$ ($N = 109$, $p = .37$), ^a Scale of 1 = “strongly agree” and 5 = “strongly disagree,” ^b Scale of 1 = “none/nothing” and 9 = “a great deal,” ^c Coded 0 = “male” and 1 = “female”

Objective Four

The fourth objective of this study compared factors, which may influence second stage teachers of SBAE in the Western United States to self-select to participate in an intensive professional development experience. Descriptive statistics (Table 4.6) disclosed acceptable levels of skew, falling between positive three and negative three, across all variables (Chan, 2003). Median summated scores for global perspectives and teacher passion were lower in those that elected to travel to Ecuador. However, the median score for summated professional commitment was higher in those that chose to travel.

Table 4.6

Description of Global Perspectives, Teacher Passion, and Professional Commitment Based on Participation in Professional Development in Ecuador (N = 116)

Variable	Median		Range		Skew	
	Ecuador- No (<i>n</i> = 103)	Ecuador- Yes (<i>n</i> = 7)	Ecuador- No (<i>n</i> = 102)	Ecuador- Yes (<i>n</i> = 7)	Ecuador- No (<i>n</i> = 109)	Ecuador- Yes (<i>n</i> = 7)
Summated Global Perspectives ^a	3.59	3.56	1.85	.79	-.11	.89
Summated Teacher Passion ^b	7.10	7.00	4.30	.90	-.06	.32
Summated Professional Commitment ^c	4.67	4.89	2.78	1.67	-.18	-.36

Note. ^a Scale of 1 = “strongly agree” and 5 = “strongly disagree,” ^b Scale of 1 = “none/nothing” and 9 = “a great deal,” ^c Scale of 1 = “strongly disagree” and 7 = “strongly agree”

Table 4.7 revealed there were no statistically significant differences ($p > .05$) in the global perspectives, teacher passion, or professional commitment of second stage teachers of SBAE who elected to attend a professional development experience in Ecuador ($n = 109$), and those who did choose to participate ($n = 7$). Thus, the distributions of those who participated in the experience and those who did not are identical. Professional commitment had a small to medium effect size while teacher

passion and global perspectives were approaching small effect sizes (Cohen, 1988 & 1992).

Table 4.7

Global Perspective, Teacher Passion and Professional Commitment Differences Between Second Stage Teachers of SBAE who Did or Did not Participate in a Professional Development Experience in Ecuador (N = 116)

Variable	<i>U</i>	<i>z</i>	<i>r</i>	<i>p</i>
Summated Global Perspectives ^a (<i>n</i> = 110)	363.00	.04	.01	.98
Summated Teacher Passion ^b (<i>n</i> = 109)	328.50	.53	.05	.79
Summated Professional Commitment ^c (<i>n</i> = 116)	506.50	1.54	.14	.15

Note. Alpha level was established at .05 *a priori*, ^a Scale of 1 = “strongly agree” and 5 = “strongly disagree,” ^b Scale of 1 = “none/nothing” and 9 = “a great deal,” ^c Scale of 1 = “strongly disagree” and 7 = “strongly agree”

Objective Five

The fifth and final research objective gave the researchers the opportunity to compare the global perspectives, passion for teaching, and professional commitment of second stage teachers before and after their intensive professional development experience in Ecuador.

Summated global perspectives were similar (*Mdn* = 3.46) before and after traveling to Ecuador, *z* = -1.01, *p* = .31, *r* = -.38, with an insignificant large effect size (Cohen, 1988 & 1992). Summated teacher passion showed an insignificant increase from before (*Mdn* = 7.00) to after the trip (*Mdn* = 7.10), *z* = -.43, *p* = .67, *r* = -.16, with a small to medium effect size. Summated professional commitment showed an

insignificant decrease from before ($Mdn = 4.89$) to after the trip ($Mdn = 4.56$), $z = 1.69$, $p = .09$, $r = .64$, with a large effect size (Cohen, 1988 & 1992) (Table 4.8).

Table 4.8

Comparison of Global Perspectives, Teacher Passion, and Professional Commitment Before and After a Professional Development Experience in Ecuador (N = 7)

Variable	<i>Mdn</i>		<i>T</i>	<i>z</i>	<i>r</i>
	Pre	Post			
Summated Global Perspectives ^a	3.46	3.46	8.00	-1.01	-.38
Summated Teacher Passion ^b	7.00	7.10	11.50	-.43	-.16
Summated Professional Commitment ^c	4.89	4.56	24.00	1.69	.64

Note. Alpha level was established at .05 *a priori*, ^a Scale of 1 = “strongly agree” and 5 = “strongly disagree,” ^b Scale of 1 = “none/nothing” and 9 = “a great deal,” ^c Scale of 1 = “strongly disagree” and 7 = “strongly agree”

CHAPTER V

CONCLUSIONS, IMPLICATIONS, AND RECOMMENDATIONS

Introduction

Teacher attrition continues to be a challenge with in the profession of agricultural education and attrition rates vary by career stage. The second stage teacher is an emerging career phase at a pivotal point in their professional development. Discovering ways to reinvigorate teachers in the second stage could influence teacher attrition by maintaining teachers within the profession of teaching agriculture.

The purpose of this study was to describe the professional commitment, global perspectives, and push pull mooring (PPM) factors of second stage teachers of school based agricultural education (SBAE) from two western states. The researchers conducted this study recognizing there were limitations regarding the two selected states. First, when generalizing results beyond the population of second stage teachers of SBAE from California and Utah and second when working with teachers from two states that differ from one another in many ways.

The researchers used quantitative non-experimental design to quantify data collected without obstruction or intervention by the researchers. The intention was to provide descriptions of the teachers in this specific population, describe how variables of interest predict their professional commitment, and explore if an intensive professional development could create change in second stage teachers of SBAE from

California and Utah. The conclusions and implications for this study are based on the following objectives:

1. Describe demographics of interest of second stage teachers of SBAE in the Western United States.
2. Describe global perspectives, teacher passion, and PPM factors of second stage teachers of SBAE in the Western United States.
3. Determine the amount of variance in professional commitment, which can be predicted by a linear combination of global perspectives, teacher passion, and gender.
4. Compare factors, which may influence second stage teachers of SBAE in the Western United States to self-select to participate in an intensive professional development experience.
5. Compare the global perspectives, passion for teaching, and professional commitment of second stage teachers before and after an intensive professional development experience.

Findings indicated second stage teachers of SBAE in California and Utah, were primarily female, ranged from 25-59 years of age, and represented all years within the second stage with most being in their 5th year of teaching. This population reported their highest dimension for global perspectives was intrapersonal and the lowest was cognitive. Mooring factors, or anchors, were rated highest on the PPM instrument, with push factors rated lowest. Second stage teachers of SBAE from California and Utah could be described as “quite a bit” passionate regarding their

chosen profession. A linear combination of global perspectives, teacher passion, and gender, described an insignificant three % of professional commitment in this population. Teachers who chose to participate in the intensive professional development event in Ecuador did not show statistically significant differences in their summated global perspectives, teacher passion, or professional commitment. Lastly, teachers who traveled to Ecuador did not exhibit significant change in their summated global perspectives, teacher passion, or professional commitment after the experience.

Conclusions and Implications

After reviewing the results, the researchers identified the following conclusions and implications to the profession of agricultural education. They are addressed by objective of the study.

The first objective was to describe demographics of interest of second stage teachers of SBAE in the Western United States. The first demographic of interest was gender. The second stage population of teachers of SBAE in California and Utah was consistent with national data in that females comprise the majority. However, while Smith et al. (2017) found 69% of teachers of SBAE were female, the second stage population of states of interest was slightly higher at 72.7%. As female teachers of SBAE have been found to have higher turnover rates (Sorensen et al., 2016; Tippens et al., 2013) second stage teachers of SBAE are perhaps more susceptible to leaving the profession than teachers in other career phases.

The audience for targeted professional development within the population of second stage teachers is more female dense than all teaching phases combined when

looking at teachers of SBAE. This may implicate approaches to professional development delivery and content when addressing the needs of second stage teachers.

The next demographic of interest was age. The average age for the specified population was around 32 years old and ranged from 25 to 59 years old. Teacher career cycle literature has evolved over time to recognize that a teacher's age does not necessarily define their career phase. While Sikes (1985) assumed all teachers started in their early 20's, that is not the case for second stage teachers of SBAE. Later career cycle literature is more holistic in its approach to evaluating the career stage independently of the age of the teacher (Day, 2008; Huberman, 1993; Kirkpatrick, 2007).

As the age of second stage teachers of SBAE has a large range (34 years), professional development activities for second stage teachers should offer appeal to all ages. Knowles (1975) recognized adult learners have a wealth of experiences, but this wealth will differ within the second stage teacher due to their varying age at career entry. This is consistent with Fessler and Christenson (1992) that teacher professional development should differ in order to be effective.

The final demographic of interest was number of years teaching. The second stage of teachers was defined as those in their fourth to tenth year of teaching (Kirkpatrick, 2007). Data indicated the largest number of teachers ($n = 23$, 19.8%) were in their 5th year of teaching and from that year on, there was a decline in the number of teachers represented by number of years teaching. This information is consistent with Goldring et al. (2014) in that during years four through nine of

teaching, teachers leave the classroom. However, looking at current second stage teachers by cohort, it looks as if a larger percent, 42%, will leave over the course of the second stage from years 4 to 10. As Kirkpatrick (2007) said, second stage teachers are vulnerable. The results of this study indicated second stage teachers of SBAE might be even more susceptible to the threat of attrition during their tenure in this specific career phase.

The second objective of this study was to describe the professional commitment, global perspectives, and teacher passion of the population. Global perspective scores were below national averages for the general form on all three domains for second stage teachers of SBAE from two western states. Participants indicated the cognitive domain was of the lowest rating indicating lower knowledge levels about how important it is to be culturally aware, while the intrapersonal domain was the highest rated indicating a higher level of social concern for others from differing cultures. This contradicted Global Perspectives Inventory (GPI) national averages, which found the interpersonal domain, or the ability to appraise one's acceptance of their own identity and the identity of others, to have the highest ratings (Research Institute for Studies in Education, 2017b).

The second stage teachers surveyed indicated that they are able to feel for their students from different cultures, but lack knowledge in why that sensation is critical to their success. As the student demographics in the states studied, continue to evolve, Braskamp's (2008) advice concerning justice, fairness, and equity should be addressed, particularly relating to knowledge gaps among our teachers.

PPM factors indicated teachers felt mooring factors were the strongest and push factors were the weakest. It should be noted the pull factor, comprised of available professional alternatives, was the second highest scoring factor. This is contradictory to the research of Goldring et al. (2014) in that 55% of teachers leave their career because they are dissatisfied. In this population, there was less of a sense of being pushed from their profession due to dissatisfaction and more of an awareness of what other professional opportunities are available besides teaching.

In specific regard to professional commitment, the results in this study both support and contradict literature regarding second stage teachers. Respondents rated their resiliency the highest and their ability to plan professionally the lowest. This suggests second stage teachers of SBAE are confident in their ability face the adversity present in the challenging profession of teaching agriculture; however, they are not confident in their ability to set professional goals and plan for their own professional development. This is consistent with Kirkpatrick (2007) in that second stage teachers are increasing in confidence and competence to perform the duties of their job. However, this information is contradictory to the findings of Steffy et al. (2000) as the results of this study indicated second stage teachers of agriculture require additional guidance and support in planning for their future in the profession; they are not confident in seeking out opportunity to improve themselves.

There is limited data available on the pulse of a teacher instrument. Teacher passion scores for the population studied were lower than scores previously reported by Swan and Cano (2005 & 2009) when evaluating student teachers upon completing

their student teaching experience. Utilizing the rating scale of the instrument, one can make the assumption second stage teachers of SBAE were “quite a bit” passionate about their profession as an agriculture teacher. This population of teachers exhibited a strong inclination, or fire, concerning their chosen profession and that fire should be fueled in order to prevent burnout. The literature suggested this passion impacts longevity and professional development should focus on maintaining high levels of passion as teachers enter the career phase of the second stage and transition to more advanced phases of the teacher career cycle.

The third objective was to determine the amount of variance in professional commitment, which could be predicted by a linear combination of global perspectives, teacher passion, and gender. These three variables revealed themselves in the literature as having the ability to influence variance in professional commitment. Contradictory to the literature, the coefficient of determination indicated global perspectives, teacher passion, and gender explained only three % of the variance of professional commitment with no statistical significance. As no research is available specifically addressing second stage teachers of SBAE, it could be concluded that this population of teachers does differ from previously studied groups in how their professional commitment is influenced.

The fourth objective compared factors, which may influence the population studied to self-select to participate in an intensive professional development experience. The literature revealed several barriers to teachers participating in international experiences as well as a negative perception of professional development

in general. Further, previous research on professional development confessed a variety of needs to be fulfilled, while the purposes of international experiences were consistently focused on the same five aspirations. However, many teachers, particularly in the western United States, have never traveled internationally, for professional or personal reasons.

Findings in this study neither support nor contradict previous findings, of which little exist, on differences within this group of teachers and why they would elect to participate in such an experience. Second stage teachers of SBAE in the western United States are consistent, as a group, in their likelihood of participating in an international intensive professional development experience regardless of their global perspectives, teacher passion, or professional commitment levels. That being said, those that did elect to participate in the international experience had a higher median score of professional commitment, although not of statistical significance.

The final objective asked the researchers to compare the global perspectives, passion for teaching, and professional commitment before and after an intensive professional development experience. The findings indicated there was no statistically significant change from pretest to posttest for any of the constructs. Findings contradicted Hodges et al. (2017) and Zamback et al. (2017) in that no change could be seen after teachers traveled to Ecuador for professional development. However, the researchers concluded, as Hodges et al. (2017) and Zamback et al. (2017) both observed, teacher change is complicated to measure, particularly as Guskey (2002) asks for change to be measured as paradigmatic variations in teachers.

Another finding of interest to the researchers was that among the three variables, professional commitment was the only one showing a decreased median. Danjean et al. (2004) found international experiences were beneficial to teachers' careers, yet the drop in professional commitment may signify the benefits support a change in profession not an inclination to stay committed to teaching SBAE.

Recommendations for Practice

The conclusions and implications of this study led to the development for the following recommendations for practice when working with second stage teacher of SBAE:

- 1) Guskey (2002) says professional development must be continuous, premeditated, and focused on reinforcing strengths one possesses as a classroom teacher. This ongoing development must extend beyond induction years and be tailored to the specific needs of teachers of the second stages. The results of this study indicated several opportunities to craft professional development opportunities around the specific demographic characteristics represented within the population of second stage teachers studied. Specifically, gender of the second stage teacher should be taken into account recognizing that this group is predominately female and female teachers of SBAE see different challenges in remaining in the profession (Hainline et al., 2015; Sorensen et al., 2016; Sorensen et al., 2017, Tippens et al., 2013). Further, those who plan and facilitate professional development for teachers by career phase should not think of

career phase by age. Within each career phase, such as the second stage, there will be teachers of varying age dictated by different age entry points into the profession of teaching.

- 2) In regard to explicit topics for professional development programming, the recommendation of this study is for leaders in agricultural education should work to create specific programming, which emphasizes the creation of professional development plans for teachers entering their second stage. The literature says the second stage is a highly competent, confident, and autonomous group of teachers (Draves, 2012; Eros, 2016; Kirkpatrick, 2007). Providing these teachers with the tools to create their own professional development plans will allow them the opportunity to define their own needs but provide them the guidance when they often feel forgotten (Conway & Eros, 2016; Kirkpatrick & Johnson, 2014).
- 3) Encouraging professional program development which can broaden knowledge in cultural competence among second stage teachers of SBAE may aid teachers in acting on the empathy they feel for students from differing backgrounds. Although not conclusive in the results of this very limited study, continued opportunity for second stage teachers of SBAE to participate in intensive professional development experiences, including those creating the opportunity for international travel, may help develop the knowledge construct of global perspectives or at least offer exposure to new knowledge.

- 4) Concerning retention, the researchers concluded with two suggestions for practice. First, retention efforts for second stage teachers in these states may opt to focus on the positive aspects of teaching agriculture as a profession making it an attractive option with compared to alternative professions (i.e. healthcare benefits, retirement planning, flexible schedules). As, within the context of this study, the threat of available professional alternatives appeared to be more impactful than professional dissatisfaction, maintaining the appeal of the profession of teaching agriculture may increase retention. Additionally, facilitators of teacher retention programming in California and Utah should concentrate on adapting programs that specifically address the factors which influence professional commitment by teacher career phase; in this case the second stage.

Recommendations for Research

Concerning recommendations for research, the researchers found the following:

- 1) The Pulse of a Teacher scale, used to measure teacher passion, should be analyzed for factors, which may exist as sub-constructs. There is little known about this instrument, and previous recommendations for factorial analysis by Swan and Cano (2005) collude with the recommendation of the researchers in this study.

- 2) The PPM instrument has never been used within the context of agricultural education. Further exploration of this instrument and its individual sub-constructs, using sampling not limited to second stage teachers, may be necessary to fully understand the viability of using the instrument to assess PPM factors and generalize them to the population of teachers of SBAE in the United States in the future. Additionally, discovering what specifically attracts or pulls our second stage teachers of SBAE to other careers could be beneficial to identify threats to retention.
- 3) As there was a significant difference in teacher passion between participants from California and Utah. This is combined with differing demographics of students and teacher credentialing processes realized when reviewing the literature. These differences should be explored and described more thoroughly.
- 4) Significant bivariate correlations existed between teacher passion and global perspectives as well as teacher passion and professional commitment. These relationships should be scrutinized further to better understand why they exist.
- 5) As there were differences in the distributed number of teachers across the number of years teaching within the second stage population examined, this should also be looked at closer in the future. For example, are PPM factors influenced by the number of years a teacher has taught? Or, is there a statistically significant difference in the level of professional commitment based on number of years teaching?

- 6) This study looked at each instrument as a summated score; there is opportunity to explore demographic variables of importance, such as gender, age, and number of years teaching within the sub-constructs of PPM and global perspectives.
- 7) Demographic data revealed a disparity in the frequency of teachers teaching by year. Conducting research which examines the longevity of a cohort of second stage teachers through the entire stage (years 4-10 of teaching) may bring additional clarity as to why teachers leave during this phase of their career.
- 8) Pretest and posttest data collected from participants during the intensive professional development event were collected during different time points during the teachers' regular year—the pretest was collected during the school year and the posttest was collected toward the end of the summer. Instruments should be redistributed to second stage teachers who participated in the Summer 2018 event in Ecuador during the school year to assess their level of change when students are present during the regular academic year.
- 9) There is opportunity to collect qualitative information from the participants who traveled to Ecuador in 2018. Maxwell (2005) said collecting data via different methods reduces systematic biases and allows for greater generalization. A qualitative investigation may provide greater insight into the change in paradigms occurring in the second stage teachers of SBAE who participated in the intensive professional development event.

10) Fernet et al. (2014) indicated an initial fire must be lit in order for one to burnout. Discovering a way to quantify the level of fire or passion in our teachers may offer additional insight into why teachers of SBAE teachers continue to progress through the career cycle or sputter out and exit the profession.

SUMMARY

The second stage of teaching is complex and presents new challenges when attempting to address attrition within the phase. Teachers of SBAE face additional trials in a profession that is as demanding as it is rewarding. This study did not find any conclusive evidence that a second stage teacher's global perspective, passion, or gender affects their commitment to the profession; nor did the results substantiate the use of intensive professional development events or international experiences to change second stage teachers. However, this study sheds light on a demographic of teacher never discussed within the profession of agricultural education. Further exploration of how professional commitment is influenced and can be strengthened, may increase retention among a talented pool of teachers during a critical point in their professional lives.

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APPENDIX A

IRB APPROVAL PART ONE-TEXAS TECH UNIVERSITY

Oct 25, 2017 11:32 AM CDT

Scott Burris
Ag Education and Communication

Re: IRB2017-699 California Second Stage Teachers of Agriculture

Findings: *Best wishes with your research!*

Dear Dr. Scott Burris, Rudolph Ritz:

A Texas Tech University IRB reviewer has approved the proposal referenced above. The approval is effective from Oct 24, 2017 within the exempt category of:

Category 2. Research involving the use of educational tests (cognitive, diagnostic, aptitude, achievement), survey procedures, interview procedures or observation of public behavior, unless: (i) information obtained is recorded in such a manner that human subjects can be identified, directly or through identifiers linked to the subjects; and (ii) any disclosure of the human subjects' responses outside the research could reasonably place the subjects at risk of criminal or civil liability or be damaging to the subjects' financial standing, employability, or reputation.

Exempt research is not subject to annual review by the IRB. Any change to your protocol requires a **Modification Submission** for review and approval prior to implementation.

Your study may be selected for a Post-Approval Review (PAR). A PAR investigator may contact you to observe your data collection procedures, including the consent process. You will be notified if your study has been chosen for a PAR.

Should a subject be harmed or a deviation occur from either the approved protocol or federal regulations (45 CFR 46), please complete an **Incident Submission** form.

Once your research is completed, please use a **Closure Submission** to terminate this protocol.

Sincerely,

Kelly C. Cukrowicz, Ph.D.
Chair, Texas Tech University Institutional Review Board
Associate Professor, Department of Psychological Sciences
357 Administration Building, Box 41075
Lubbock, Texas 79409-1075
T 806.742.2064 F 806.742.3947
www.hrpp.ttu.edu

APPENDIX B

**IRB APPROVAL PART ONE MODIFICATION-TEXAS TECH
UNIVERSITY**

Feb 19, 2018 4:04 PM CST

Scott Burris
Ag Education and Communication

Re: IRB2017-699 California Second Stage Teachers of Agriculture
Findings: This modification is approved.

Dear Dr. Scott Burris, Rudolph Ritz:

A Texas Tech University IRB reviewer has approved your proposed modification to the protocol referenced above within the exempt category of:

Exempt research is not subject to annual review by the IRB. Any change to your protocol requires a **Modification Submission** for review and approval prior to implementation.

Your study may be selected for a Post-Approval Review (PAR). A PAR investigator may contact you to observe your data collection procedures, including the consent process. You will be notified if your study has been chosen for a PAR.

Should a subject be harmed or a deviation occur from either the approved protocol or federal regulations (45 CFR 46), please complete an **Incident Submission** form.

Once your research is complete, please use a **Closure Submission** to terminate this protocol.

Sincerely,

Kelly C. Cukrowicz, Ph.D.
Chair, Texas Tech University Institutional Review Board
Professor, Department of Psychological Sciences
357 Administration Building, Box 41075
Lubbock, Texas 79409-1075
T 806.742.2064 F 806.742.3947
www.hrpp.ttu.edu

APPENDIX C

IRB APPROVAL PART TWO-TEXAS TECH UNIVERSITY

Mar 19, 2018 11:12 AM CDT

Scott Burris
Ag Education and Communication

Re: IRB2017-885 Second Stage Teachers of Agriculture International Professional Development

Findings: *Exempt category 2 is approved for this study. Best wishes on your research.*

Dear Dr. Scott Burris, Rudolph Ritz:

A Texas Tech University IRB reviewer has approved the proposal referenced above. The approval is effective from March 19, 2018 within the exempt category of:

Category 2. Research involving the use of educational tests (cognitive, diagnostic, aptitude, achievement), survey procedures, interview procedures or observation of public behavior, unless: (i) information obtained is recorded in such a manner that human subjects can be identified, directly or through identifiers linked to the subjects; and (ii) any disclosure of the human subjects' responses outside the research could reasonably place the subjects at risk of criminal or civil liability or be damaging to the subjects' financial standing, employability, or reputation.

Exempt research is not subject to annual review by the IRB. Any change to your protocol requires a **Modification Submission** for review and approval prior to implementation.

Your study may be selected for a Post-Approval Review (PAR). A PAR investigator may contact you to observe your data collection procedures, including the consent process. You will be notified if your study has been chosen for a PAR.

Should a subject be harmed or a deviation occur from either the approved protocol or federal regulations (45 CFR 46), please complete an **Incident Submission** form.

Once your research is completed, please use a **Closure Submission** to terminate this protocol.

Sincerely,

Kelly C. Cukrowicz, Ph.D.
Chair, Texas Tech University Institutional Review Board
Professor, Department of Psychological Sciences
357 Administration Building, Box 41075
Lubbock, Texas 79409-1075
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www.hrpp.ttu.edu

APPENDIX D

IRB APPROVAL PART ONE-TEXAS A&M UNIVERSITY

DIVISION OF RESEARCH



PERMISSION TO RELY

April 16, 2018

Type of Review:	Initial Review
Title:	California Second Stage Teachers of Agriculture
Investigator:	Julie Harlin
IRB ID:	IRB2018-0360
Reference Number:	074994
Documents Received:	UT Centralized IRB Review Agreement; IRB Application Version 1.0; information sheet; irb 1 modification approval gorter; irb 1 approval gorter; survey introduction; pre-survey email language; survey email language; irb 1 gorter; proposed instrument

Dear Julie Harlin:

The Texas A&M University HRPB reviewed the above submission and determined on 4/13/2018 that this research meets the criteria for being reviewed under the UT System Reciprocity Agreement by Texas Tech University.

This research study should not be initiated until Texas Tech University has approved the conduct of the research study and all other ancillary approvals have been obtained.

If you have any questions, please contact the IRB Administrative Office at 1-979-458-4067, toll free at 1-855-795-8636.

Sincerely,
IRB Administration

750 Agronomy Road, Suite 2701
1186 TAMU
College Station, TX 77843-1186
Tel. 979.458.1467 Fax. 979.862.3176
<http://rcb.tamu.edu>

APPENDIX E

IRB APPROVAL PART TWO-TEXAS A&M UNIVERSITY

DIVISION OF RESEARCH



PERMISSION TO RELY

April 13, 2018

Type of Review:	Initial Review
Title:	Second Stage Teachers of Agriculture International Professional Development
Investigator:	Julie Harlin
IRB ID:	IRB2018-0361
Reference Number:	074995
Documents Received:	UT Centralized IRB Review Agreement; IRB Application Version 1.0; Versions 1.0: IRB 2 Approval Gorter; second ecuador pre-survey email language; Ecuador survey email language; Ecuador information sheet; irb 2 gorter; pre ecuador proposed instrument; post ecuador proposed instrument

Dear Julie Harlin:

The Texas A&M University HRPP reviewed the above submission and determined on 4/13/2018 that this research meets the criteria for being reviewed under the UT System Reciprocity Agreement by Texas Tech University.

This research study should not be initiated until Texas Tech University has approved the conduct of the research study and all other ancillary approvals have been obtained.

If you have any questions, please contact the IRB Administrative Office at 1-979-458-4067, toll free at 1-855-795-8636.

Sincerely,
IRB Administration

750 Agronomy Road, Suite 2701
1186 TAMU
College Station, TX 77843-1186
Tel. 979.458.1467 Fax. 979.862.3176
<http://rcb.tamu.edu>

APPENDIX F
COMPLETE QUALTRICS INSTRUMENT

You are being asked to voluntarily participate in this research project investigating professional commitment factors among agriculture teachers from California and Utah.

1) For these studies you will be asked to:

- a. Provide basic demographic information.
- b. Reflect upon your current teaching profession as an agriculture teacher.

2) Mrs. Erin Gorter is in charge of the project (805-756-5362). She is a student in the Agricultural Education & Communications Department at TTU. You can contact her if you have questions about the research.

3) No potential harm to you is foreseen in the current study and this study has been approved by the Texas Tech University Institutional Review Board for the Protection of Human Subjects (IRB Protocol #2017-699)

4) Your participation is appreciated. Completing this research project should take about 20-30 minutes. No one but Mrs. Gorter, and her committee will see the information you provide in these studies. Your responses will be recorded without your name, making it impossible for others to link your responses to you.

5) At the conclusion of this study, you will have the opportunity to enter into a drawing for one of two \$50 Staples gift cards. The information used to enter you into this drawing will not be linked to your survey responses in any way.

6) Doing this study is completely up to you. During this study, if anything makes you uncomfortable, you may skip it. You can withdraw your participation at any time without penalty by simply closing your browser. You do not give up any legal rights by participating in this study.

7) If you have any concerns about the study, Mrs. Erin Gorter I will answer any questions you have. For questions about your rights as a participant or about injuries caused by this research, please contact the Texas Tech University Institutional Review Board (IRB) Office, at 806-742-2064. You can also mail your questions to the Human Research

Protection Program, Office of the Vice President for Research, Texas Tech University,
Lubbock, Texas 79409 or email them to hrpp@ttu.edu.

During the 2017-18 academic year, I will have completed teaching how many years:

- 4
- 5
- 6
- 7
- 8
- 9
- 10
- None of the above

Please rate each item on a scale of “strongly disagree” to “strongly agree.”

	Strongly Disagree	Disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Agree	Strongly agree
I am satisfied with the success I have achieved in the profession.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am satisfied with the progress I have made toward achieving my overall professional goals.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
	Strongly Disagree	Disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Agree	Strongly agree
	Strongly		Somewhat	Neither agree nor	Somewhat		Strongly

	Strongly Disagree	Disagree	Somewhat disagree	nor disagree	Somewhat agree	Agree	Strongly agree
I am satisfied with my rate of promotion in the profession.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
	Strongly Disagree	Disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Agree	Strongly agree
I am satisfied with the pay level I have achieved in the profession	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
	Strongly Disagree	Disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Agree	Strongly agree
I am satisfied with the status that I have achieved in the profession.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
	Strongly Disagree	Disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Agree	Strongly agree
I can get another comparable/better professional opportunity easily if I want to.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
	Strongly Disagree	Disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Agree	Strongly agree
There are enough other good professional options for me at the labor market that I can do.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
	Strongly Disagree	Disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Agree	Strongly agree
	Strongly		Somewhat	Neither agree nor	Somewhat		Strongly

	Strongly Disagree	Disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Agree	Strongly agree
It will be difficult for me to change to another profession.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I have invested a lot in my profession.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I have invested specific and non-portable training in my profession.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I have made a lot of adjustments in the private sphere in my profession.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I have to refrain from certain things in my life in my profession.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I have invested job tenure in my profession.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
	Strongly Disagree	Disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Agree	Strongly agree
	Strongly		Somewhat	Neither agree nor	Somewhat		Strongly

	Strongly Disagree	Disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Agree	Strongly agree
I have invested length of service in my profession.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Teaching agriculture is an important part of who I am.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I do not feel "emotionally attached" to the profession of teaching agriculture.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I strongly identify with the idea of teaching agriculture as a profession.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I have created a plan for my development as a professional agriculture teacher.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
	Strongly Disagree	Disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Agree	Strongly agree
	Strongly		Somewhat	Neither agree nor	Somewhat		Strongly

	Strongly Disagree	Disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Agree	Strongly agree
I do not have a strategy for achieving my career goals as a professional agriculture teacher.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I have not identified specific goals for my own personal development as a professional agriculture teacher.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Given the problems I encounter in the profession of teaching agriculture, I sometimes wonder if I get enough out of it.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Given the problems in the profession of teaching agriculture, I sometimes wonder if the personal burden is worth it.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
	Strongly Disagree	Disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Agree	Strongly agree
	Strongly		Somewhat	Neither agree nor	Somewhat		Strongly

	Strongly Disagree	Disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Agree	Strongly agree
The discomforts associated with the profession of teaching agriculture sometimes seem too great.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Compared with other agriculture teachers, I am confident in my expertise.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Compared with other agriculture teachers, I am confident in my professional skills.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I have faith in the capability to learn new expertise constantly.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I have faith in the capability to learn new professional skills constantly.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
	Strongly Disagree	Disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Agree	Strongly agree
	Strongly		Somewhat	Neither agree nor	Somewhat		Strongly

	Strongly Disagree	Disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Agree	Strongly agree
I can easily transfer to another assignment in my current profession of teaching agriculture.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The required technical knowledge of my current profession changes constantly.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
New development in the agricultural education field would lend my professional knowledge obsolete to a large extent.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My specialty is getting out-of-date quickly.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My professional knowledge becomes obsolete at an accelerated pace.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
	Strongly Disagree	Disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Agree	Strongly agree
	Strongly		Somewhat	Neither agree nor	Somewhat		Strongly

Recent graduates appear to have learned some things I know little about that are relevant to my profession as an agriculture teacher.

	Strongly Disagree	Disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Agree	Strongly agree
	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

I have to be engaged in continuous learning to keep up with colleagues in my own school.

	Strongly Disagree	Disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Agree	Strongly agree
	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

For fear of falling behind other agriculture teachers, I devote a great deal of time to remain competent.

	Strongly Disagree	Disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Agree	Strongly agree
	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Please rate each item on a scale of “strongly disagree” to “strongly agree.”

When I notice cultural differences, my culture tends to have the better approach.

	Strongly Disagree	Disagree	Neither agree nor disagree	Agree	Strongly Agree
	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

I have a definite purpose in my life.

	Strongly Disagree	Disagree	Neither agree nor disagree	Agree	Strongly Agree
	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

	Strongly Disagree	Disagree	Neither agree nor disagree	Agree	Strongly Agree
I can explain my personal values to people who are different from me.	Strongly Disagree	Disagree	Neither agree nor disagree	Agree	Strongly Agree
	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Most of my friends are from my own ethnic background.	Strongly Disagree	Disagree	Neither agree nor disagree	Agree	Strongly Agree
	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I think of my life in terms of giving back to society.	Strongly Disagree	Disagree	Neither agree nor disagree	Agree	Strongly Agree
	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Some people have a culture and others do not.	Strongly Disagree	Disagree	Neither agree nor disagree	Agree	Strongly Agree
	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
In different settings what is right and wrong is simply to determine.	Strongly Disagree	Disagree	Neither agree nor disagree	Agree	Strongly Agree
	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am informed of current issues that impact international relations.	Strongly Disagree	Disagree	Neither agree nor disagree	Agree	Strongly Agree
	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
	Strongly Disagree	Disagree	Neither agree nor disagree	Agree	Strongly Agree

	Strongly Disagree	Disagree	Neither agree nor disagree	Agree	Strongly Agree
I know who I am as a person.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I feel threatened around people from backgrounds different from my own.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I often get out of my comfort zone to better understand myself.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am willing to defend my own views when they differ from others.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I understand the reasons and causes of conflict among nations of different cultures.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I work for the rights of others.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I see myself as a global citizen.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

	Strongly Disagree	Disagree	Neither agree nor disagree	Agree	Strongly Agree
I take into account different perspectives before drawing conclusions about the world around me.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I understand how various cultures of this world interact socially.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I put my beliefs into action by standing up for my principles.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I consider different cultural perspectives when evaluating global problems.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I rely primarily on authorities to determine what is true in the world.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I know how to analyze the basic characteristic of a culture.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am sensitive to those who are discriminated against.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

	Strongly Disagree	Disagree	Neither agree nor disagree	Agree	Strongly Agree
I do not feel threatened emotionally when presented with multiple perspectives.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I frequently interact with people from a race/ethnic group different from my own.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am accepting of people with different religious and spiritual traditions.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I put the needs of others above my own personal wants.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I can discuss cultural perspectives from an informed perspective.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am developing a meaningful philosophy of life.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

	Strongly Disagree	Disagree	Neither agree nor disagree	Agree	Strongly Agree
I intentionally involve people from many cultural backgrounds in my life.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I rarely question what I have been taught about the world around me.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I enjoy when my friends from other cultures teach me about our cultural differences.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I consciously behave in terms of making a difference.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am open to people who strive to live lives very different from my own life style.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Volunteering is not an important priority in my life.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

	Strongly Disagree	Disagree	Neither agree nor disagree	Agree	Strongly Agree
I frequently interact with people from a country different from my own.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Please rate each item on a scale of "none/nothing" to "a great deal."

	None/Nothing	Very Little	Some	Quite a Bit	A Great Deal
How much passion do you have for teaching?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
To what extent do you do things for students, even when they are against you?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
How much enthusiasm do you display to get your students to learn?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
To what extent do you desire to maintain your passion as a teacher?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
How much energy do you invest to ensure your students become successful in life?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
To what extent do your actions as a teacher shape the learning environment?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
How much do you care about your students as a person?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

	None/Nothing	Very Little	Some	Quite a Bit	A Great Deal
To what extent did you follow your heart in choosing teaching as your career?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
To what extent do your personal values affect your teaching?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
To what extent are you responsible for your students' failures?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
How much do you follow your heart when interacting with students?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
To what extent do you want your students to look to you for advice?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
To what extent did you choose to teach for the love of the work?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
To what extent do you model your teaching after teachers who are innovative teachers?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
How much do you want to make a difference in your students' lives?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
To what extent do you participate with your students to enrich your life?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

To what extent do you teach because of material rewards (i.e. money and awards)?

None/Nothing	Very Little	Some	Quite a Bit	A Great Deal
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

The degree of your students' success depends on how much you personally care for them?

None/Nothing	Very Little	Some	Quite a Bit	A Great Deal
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

To what extent are you responsible for your failures as a teacher?

None/Nothing	Very Little	Some	Quite a Bit	A Great Deal
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

To what extent do you want to keep your values from influencing your students?

None/Nothing	Very Little	Some	Quite a Bit	A Great Deal
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

I identify as:

- Female
- Male

Please specify your ethnicity.

- White
- Hispanic or Latino
- Black or African American
- Asian
- Native Hawaiian or Pacific Islander
- Other

What is your age?

I teach in the following region:

- CA-Central CA-
- North Coast CA-
- San Joaquin
- CA-South Coast
- CA-Southern
- CA-Superior
- UT-Area 1
- UT-Area 2
- UT-Area 3
- UT-Area 4
- UT-Area 5
- UT-Area 6
- UT-Area 7
- UT-Area 8
- UT-Area 9
- UT-Area 10

I completed my teaching credentials at:

- CSU Chico
- CSU Fresno
- Cal Poly, Pomona
- Cal Poly, San Luis Obispo
- UC Davis
- Utah State University
- Other (please specify)

My undergraduate degree was in:

- Agricultural Science (Teacher Preparation)
- Animal Science
- Horticulture & Crop Science
- Agricultural Systems Management/Agricultural Engineering
- Other (please specify)

I hold the following credential(s) (check all that apply):

- Single Subject, Agriculture
- Specialist, Agriculture
- Designated Subject, Agriculture
- Secondary Education License with an Agriculture Endorsement
- Other (please specify)

The Career Technical Education pathway I primarily teach is:

- Agricultural Business
- Agricultural Mechanics
- Agriscience
- Animal Science
- Forestry & Natural Resources
- Ornamental Horticulture Plant
- Science

Thank you for participating in this study. If you would like to be entered in the drawing for a \$50 Staples gift card, please click below.

- Yes
- No

What are your first and last name?

What is your email address?

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APPENDIX G

GLOBAL PERSPECTIVES INVENTORY

GPI Instrument

	Strongly Agree	Agree	Neither Agree or Disagree	Disagree	Strongly Disagree
When I notice cultural differences, my culture tends to have the better approach.	1	2	3	4	5
I have a definite purpose in my life.	1	2	3	4	5
I can explain my personal values to people who are different from me.	1	2	3	4	5
Most of my friends are from my own ethnic background.	1	2	3	4	5
I think of my life in terms of giving back to society.	1	2	3	4	5
Some people have a culture and others do not.	1	2	3	4	5
In different settings what is right and wrong is simply to determine.	1	2	3	4	5
I am informed of current issues that impact international relations.	1	2	3	4	5
I know who I am as a person.	1	2	3	4	5
I feel threatened around people from backgrounds different from my own.	1	2	3	4	5
I often get out of my comfort zone to better understand myself.	1	2	3	4	5
I am willing to defend my own views when they differ from others.	1	2	3	4	5
I understand the reasons and causes of conflict among nations of different cultures.	1	2	3	4	5
I work for the rights of others.	1	2	3	4	5
I see myself as a global citizen.	1	2	3	4	5
I take into account different perspectives before drawing conclusions about the world around me.	1	2	3	4	5
I understand how various cultures of this world interact socially.	1	2	3	4	5
I put my beliefs into action by standing up for my principles.	1	2	3	4	5
I consider different cultural perspectives when evaluating global problems.	1	2	3	4	5
I rely primarily on authorities to determine what is true in the world.	1	2	3	4	5
I know how to analyze the basic characteristic of a culture.	1	2	3	4	5
I am sensitive to those who are discriminated against.	1	2	3	4	5
I do not feel threatened emotionally when presented with multiple perspectives.	1	2	3	4	5
I frequently interact with people from a race/ethnic group different from my own.	1	2	3	4	5
I am accepting of people with different religious and spiritual traditions.	1	2	3	4	5
I put the needs of others above my own personal wants.	1	2	3	4	5
I can discuss cultural perspectives from an informed perspective.	1	2	3	4	5
I am developing a meaningful philosophy of life.	1	2	3	4	5
I intentionally involve people from many cultural backgrounds in my life.	1	2	3	4	5
I rarely question what I have been taught about the world around me.	1	2	3	4	5
I enjoy when my friends from other cultures teach me about our cultural differences.	1	2	3	4	5
I consciously behave in terms of making a difference.	1	2	3	4	5
I am open to people who strive to live lives very different from my own life style.	1	2	3	4	5
Volunteering is not an important priority in my life.	1	2	3	4	5
I frequently interact with people from a country different from my own.	1	2	3	4	5

APPENDIX H

PULSE OF A TEACHER SCALE

Pulse of a Teacher Scale

	None/Nothing	Very Little	Some	Quite a Bit	A Great Deal
How much passion do you have for teaching?	1	3	5	7	9
To what extent do you do things for students, even when they are against you?	1	3	5	7	9
How much enthusiasm do you display to get your students to learn?	1	3	5	7	9
To what extent do you desire to maintain your passion as a teacher?	1	3	5	7	9
How much energy do you invest to ensure your students become successful in life?	1	3	5	7	9
To what extent do your actions as a teacher shape the learning environment?	1	3	5	7	9
How much do you care about your students as a person?	1	3	5	7	9
To what extent did you follow your heart in choosing teaching as your career?	1	3	5	7	9
To what extent do your personal values affect your teaching?	1	3	5	7	9
To what extent are you responsible for your students' failures?	1	3	5	7	9
How much do you follow your heart when interacting with students?	1	3	5	7	9
To what extent do you want your students to look to you for advice?	1	3	5	7	9
To what extent did you choose to teach for the love of the work?	1	3	5	7	9
To what extent do you model your teaching after teachers who are innovative teachers?	1	3	5	7	9
How much do you want to make a difference in your students' lives?	1	3	5	7	9
To what extent do you participate with your students to enrich your life?	1	3	5	7	9
To what extent do you teach because of material rewards (i.e. money and awards)?	1	3	5	7	9
The degree of your students' success depends on how much you personally care for them?	1	3	5	7	9
To what extent are you responsible for your failures as a teacher?	1	3	5	7	9
To what extent do you want to keep your values from influencing your students?	1	3	5	7	9

APPENDIX I

PUSH PULL MOORING INSTRUMENT

PPM Instrument

Professional Satisfaction	Strongly Disagree			Strongly Agree			
SAT01. I am satisfied with the success I have achieved in the profession.	1	2	3	4	5	6	7
SAT02. I am satisfied with the progress I have made toward achieving my overall professional goals.	1	2	3	4	5	6	7
SAT03. I am satisfied with my rate of promotion in the profession.	1	2	3	4	5	6	7
SAT04. I am satisfied with the pay level I have achieved in the profession.	1	2	3	4	5	6	7
SAT05. I am satisfied with the status that I have achieved in the profession.	1	2	3	4	5	6	7
Availability of Career Alternatives							
ALT01. I can get another comparable/better professional opportunity easily if I want to.	1	2	3	4	5	6	7
ALT02. There are enough other good professional options for me at the labor market that I can do.	1	2	3	4	5	6	7
ALT02. It will be difficult for me to change to another profession. (R)	1	2	3	4	5	6	7
Career Investment							
INV01. I have invested a lot in my profession.	1	2	3	4	5	6	7
INV02. I have invested specific and non-portable training in my profession.	1	2	3	4	5	6	7
INV03. I have made a lot of adjustments in the private sphere in my profession.	1	2	3	4	5	6	7
INV04. I have to refrain from certain things in my life in my profession.	1	2	3	4	5	6	7
INV05. I have invested job tenure in my profession.	1	2	3	4	5	6	7
INV06. I have invested length of service in my profession.	1	2	3	4	5	6	7
Professional Identify							
CAI01. Teaching agriculture is an important part of who I am.	1	2	3	4	5	6	7
CAI02. I do not feel "emotionally attached" to the profession of teaching agriculture. (R)	1	2	3	4	5	6	7
CAI03. I strongly identify with the idea of teaching agriculture as a profession.	1	2	3	4	5	6	7
Professional Planning							
CAP01. I have created a plan for my development as a professional agriculture teacher.	1	2	3	4	5	6	7
CAP02. I do not have a strategy for achieving my career goals as a professional agriculture teacher. (R)	1	2	3	4	5	6	7
CAP03. I have not identified specific goals for my own personal development as a professional agriculture teacher. (R)	1	2	3	4	5	6	7
Professional Resilience							
CAR01. Given the problems I encounter in the profession of teaching agriculture, I sometimes wonder if I get enough out of it. (R)	1	2	3	4	5	6	7
CAR02. Given the problems in the profession of teaching agriculture, I sometimes wonder if the personal burden is worth it. (R)	1	2	3	4	5	6	7
CAR03. The discomforts associated with the profession of teaching agriculture sometimes seem too great. (R)	1	2	3	4	5	6	7
Professional Self-Efficacy							
SE01. Compared with other agriculture teachers, I am confident in my expertise.	1	2	3	4	5	6	7
SE02. Compared with other agriculture teachers, I am confident in my professional skills.	1	2	3	4	5	6	7
SE03. I have faith in the capability to learn new expertise constantly.	1	2	3	4	5	6	7
SE04. I have faith in the capability to learn new professional skills constantly.	1	2	3	4	5	6	7
Threat of Professional Obsolescence—Scope							
TPO_S01. I can easily transfer to another assignment in my current profession of teaching agriculture.	1	2	3	4	5	6	7
TPO_S02. The required technical knowledge of my current profession changes constantly.	1	2	3	4	5	6	7
TPO_S03. New development in the agricultural education field would lend my professional knowledge obsolete to a large extent.	1	2	3	4	5	6	7
Threat of Professional Obsolescence—Time							
TPO_T01. My specialty is getting out-of-date quickly.	1	2	3	4	5	6	7
TPO_T02. My professional knowledge becomes obsolete at an accelerated pace.	1	2	3	4	5	6	7
Threat of Professional Obsolescence—Social Comparison							
TPO_C01. Recently credentialed agriculture teachers appear to have learned some things I know little about that are relevant to my profession as an agriculture teacher.	1	2	3	4	5	6	7
TPO_C02. I have to be engaged in continuous learning to keep up with colleagues in my own school.	1	2	3	4	5	6	7
TPO_C03. For fear of falling behind other agriculture teachers, I devote a great deal of time to remain competent.	1	2	3	4	5	6	7