A CASE STUDY OF FOUR AGRICULTURAL SCIENCE TEACHERS' PREPARATION FOR TEACHING SPECIAL NEEDS STUDENTS

A Dissertation

by

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ABSTRACT

No Child Left Behind (2002) and the Individuals with Disabilities Education Act (2004) have changed the way students with disabilities are educated in public schools today. The purpose of this study was to examine the preservice program at an 1876 land grant institution and determine if it was adequately preparing students to meet the needs of special education students in their classrooms. The question that guided this study was: What were the voices of agricultural science teachers regarding their preparation to meet the needs of special education students in agricultural science classrooms? This study utilized qualitative case study methodology and interpretive phenomenological analysis in order for the researcher to gain knowledge about the participants' experiences. Three themes emerged as a result of this qualitative analysis: learning by doing, lack of preparedness, and room for improvement. Field experiences were cited as the most meaningful learning experiences. Recommendations for bridging the gap between theory and practice include modeling differentiated instruction practices by faculty, providing opportunities for implementing differentiated objectives and instruction, and facilitating better communication between special education staff and student teachers during the student teaching semester.

DEDICATION

The road to finally completing this dissertation was a very long one. It took the time and patience of many people to keep encouraging me to complete it. First and foremost I would like to thank my family. The love and support given to me by both my parents and my children was a constant reminder that I could do this. It was my love for them that kept me going. Also, to my husband, Kirk, who has helped me in so many ways!!

I would also like to thank my committee members for their tireless efforts to help me complete this journey. It was with their guidance that I was able to write this dissertation in the first place, and I am forever grateful to them for all of their help. You have each impacted my career in so many ways. Thank you from the bottom of my heart!

Finally, I would like to dedicate this dissertation to the young agricultural science teachers out there and their special needs students. You are the reason I did this study, and I hope that what I have found will help future new teachers be more prepared to reach and engage all learners, regardless of ability. Every child is special, and special teachers are driven by that.

God bless!

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CHAPTER I

INTRODUCTION

Special education has undergone many changes in recent years. With revisions to the Individuals with Disabilities Education Act (IDEA, 2004) and No Child Left Behind (NCLB, 2002), the inclusion of special needs students into regular education classrooms has brought about the need to differentiate instruction in such a way that every learner in an instructional setting is reached. With the numbers of students enrolled in special education growing 30% over the past 10 years (National Education Association, 2014), the need to prepare teachers to handle the rigors of teaching special needs students within an inclusive classroom has also grown.

Based on these new legislative changes, the advent of inclusion has brought a renewed focus and attention to agricultural education classrooms. Although teaching students with special needs is nothing new in agricultural education, being held accountable is a major component of NCLB (2002). With the accountability presented under NCLB and the advent of differentiated instruction, preservice agricultural education programs have also had to reexamine how they prepare future agricultural science teachers.

Preservice teacher education programs for agriculture science exist at 89 colleges and universities throughout the United States (Kantrovich, 2010). Based on previously conducted studies (Elbert & Baggett, 2003; Kessell, Wingenbach & Lawver, 2009; Hoerst & Whittington, 2006), there is a need to include more training to prepare

agriculture science teacher education candidates for meeting the needs of special needs students. Agriculture science teachers have previously reported feeling comfortable with cooperative learning as a strategy for including all learners (Kessell, Wingenbach & Lawver, 2009). However, within that study, the participants did not report feeling confident with regards to teaching students with special needs unless they had a previous history (Kessell, Wingenbach & Lawver, 2009). Also, another study found that secondary agricultural science teachers in the study indicated they needed to learn more teaching techniques for inclusion (Hoerst & Whittington, 2006).

Further, Hoerst and Whittington (2006) found that preservice agricultural education programs needed to include more instruction about how to "operate an inclusion classroom," in such a way that it focuses on using methods of teaching that are positive with regards to students with special needs. This same study also found that agricultural education must "integrate inclusion processes into the programming, such that it is an area of education that is recognized as supporting the diverse needs of learners," (Hoerst & Whittington, 2006, 50.)

Studies (Kessell, Wingenbach & Lawver, 2009; Hoerst & Whittington, 2006) conducted regarding agricultural science preservice teacher preparation programs have found that students graduating from those programs report feeling not fully prepared for the challenges of teaching students with learning disabilities or special needs. The necessity for agricultural science teachers to teach special needs students is a nationwide concern due to growing numbers of special needs students (Hoerst & Whittington, 2006).

Statement of the Problem

Federal law now dictates that all students must be in a least restrictive environment and that all students are held to grade level standards (IDEA, 2004 and NCLB, 2002). Another aspect to how we prepare future agricultural science teachers is in the turmoil surrounding public education. Over the past two years, growing criticism of standardized testing and a cry from business leaders that not enough students are entering the workforce with job skills, has policy makers and business leaders looking at ways to include more career and technology education in public schools (Sass, 2013). Add to that a monumental court decision that has declared the way public education is funded in Texas to be unconstitutional (Alexander, 2012). The opportunity to prepare future agricultural science teachers for the challenges of a modern classroom is no longer an option, but a must, to stay competitive in today's current educational climate.

Research also suggests that preservice teachers do not feel prepared to meet the challenges of teaching in a diverse classroom. According to Falkner (2010), preservice agricultural science teachers and their teacher educators in agricultural education reported that training was provided regarding learning disabled students, but that the most common used modification/accommodation was cooperative group learning and extended time. A 2009 study also found that student teachers' were knowledgeable about Individualized Education Plans (IEPs) and general definitions but were not prepared to meet the challenges of accommodating special needs students in agricultural education classrooms and laboratories (Kessell, Wingenbach, & Lawver, 2009).

This study also found that agricultural education student teachers in the AAAE

southern region had a significant relationship between their total confidence and knowledge of one special education criteria. This area was in providing a least restrictive environment for special needs students in the agricultural science classrooms and laboratories (Kessell, Wingenbach, & Lawver, 2009). The study concluded that if the student teaching experience is designed to enhance preservice teachers' skills and abilities for educating all students, then a greater emphasis should be placed on the knowledge of inclusion strategies such as those found in general education student teaching programs. This study also found that student teachers felt that if they had to teach special education students in agricultural classrooms/laboratories and had spent time with a special needs person outside an academic setting, that student teacher would experience statistically significant positive confidence in teaching special needs students (Kessell, Wingenbach, & Lawver, 2009).

The focus on the learning disabled in the agricultural science classroom is very important because special education students are "noticeably different in terms of their academic ability in relation to their peers," (Moffitt, 2004, p. 12). They require more planning and more transition services in order to have a productive life after high school (Moffitt, 2004). "It is our learning disabled students who could possibly benefit most from the things agricultural education has to offer. Career and technical education has the potential to give students concrete skills that they can use in the job market and hopefully have an equal opportunity at employment" (Moffitt, 2004, p. 12). Not only could these students stand to benefit greatly from the vocational training they receive through agricultural education, a 2009 study by Pense found that nearly one-fourth of

students in secondary agricultural education classes had specific learning disabilities (Pense, 2009). The current climate of education is changing as we speak. The need to be as current and proactive as possible is a must.

Purpose of the Study

No Child Left Behind (2002) and the Individuals with Disabilities Education Act (2004) have changed the way students with disabilities are educated in public schools. Both laws are clear that students with disabilities are to be educated in the least restrictive environment. This has brought about the advent of differentiated instruction and inclusion. Both of these educational terms are now commonplace in the vernacular of today's teacher; however, agricultural education, that has long taught students in an inclusive setting, has seemed to be behind in terms of preparing future agricultural science teachers for differentiating instruction to include special needs learners. Although this is a time of great educational reform, agricultural education seems to have stayed in the very same place in regards to preservice teacher preparation. The purpose of this study was to look at the preservice program at an 1876 land grant institution and determine if it was adequately preparing its students to meet the needs of special education students in their classrooms.

According to a 2007 study, preservice agricultural science teachers and their teacher educators agree that training was provided regarding learning disabled students, but that the most common used modification/accommodation was cooperative group learning and extended time (Falkner, 2010). A 2009 study also found that student

teachers' were knowledgeable about Individualized Education Plans (IEPs) and general definitions, but they were not prepared to meet the challenges of accommodating special needs students in agricultural education classrooms and laboratories (Kessell, Wingenbach, & Lawver, 2009).

Differentiated instruction is a method of instruction designed to recognize students "varying background knowledge, readiness, language, preferences in learning and interests; and to react responsively. Differentiated instruction is a process to approach teaching and learning for students of differing abilities in the same class. The intent of differentiating instruction is to maximize each student's growth and individual success by meeting each student where he or she is, and assisting in the learning process," (Hall, Strangman & Meyer, 2009).

Another study found that agricultural science teachers are using "recognized practices in their classes" though they are more likely to use practices that impact students "as a whole or are easy to use rather than individualized strategies for students with special needs" (Stair, 2009). This research also showed that teachers feel they are able to provide quality instruction to learning disabled students, however they "generally disagreed that their teacher training program prepared them to work with students with disabilities" (Stair, 2009).

This study is an examination of the preservice program for agricultural science teaching majors at an 1876 land grant institution in Texas. Prior studies conducted cited a need for further research with regards to the preparation and teacher self efficacy as it pertained to teaching students with special needs and/or learning disabilities in a fully

inclusive classroom. The following qualitative study focuses on a single program in order to more closely examine where any issues may specifically lie. This study is organized by reporting the purpose of the study, statement of the problem, the research question, the conceptual framework, about the researcher, the methodology, the results, and finally, conclusions and recommendations.

Research Question

The question that guided this study was: What were the voices of agricultural science teachers regarding their preparation to meet the needs of special education students in agricultural science classrooms?

Significance of the Study

As research suggests that agricultural education teachers are struggling to reach special needs students, specifically first year students (Kessell, Wingenbach & Lawver, 2009), the need to focus on preservice agricultural education programs arises. Education reform, including the push for differentiated instruction that is student-centered rather than teacher-centered, has affected every classroom in the United States (NCLB, 2002; IDEA, 2004).

With all of this change occurring at the secondary level, it only makes sense to examine programs at the post secondary level to see if in fact they are meeting the needs of agricultural science teacher candidates with regards to special needs students.

Smith, Flowers, and Larkin (2009) state that the author of a qualitative study must not only state why a study is important academically, but also, why it is important

to the researcher. In order for one to understand the lens that I am looking through, I must share the experiences that led me to this study. I am a veteran teacher with 15 years of experience, but my experience is anything but typical. Having started out in a traditional agricultural science preservice program at another southwestern university to teaching special education today, I am a teacher who has taught at every level and seen many changes in education along the way.

My first experience with education was actually not as a teacher. After receiving my bachelors of science in agricultural communications from the other southwestern university in December of 1995, I took the position of communications specialist with the Vocational Agriculture Teachers Association of Texas (VATAT). For two years, I communicated with the membership about legislative updates and observed how our executive director lobbied for career and technology education at the state level. This shaped a very unique view of the politics of education. It was the first time in my life that I realized those making educational policies were not actually educators.

Another eye opening aspect of working for the VATAT was witnessing how many legal issues arose for teachers. Whether it was power struggles between teachers and principals or having to defend oneself against claims of sexual misconduct or even mishandling money, teachers, it seemed, were subject to attack and accusations. Teaching had a legal and ethical side to it that was way beyond pencil and paper. This was a very eye opening experience for me. I guess it was the first time that I became aware that teachers could find themselves in positions where they needed a lawyer. While working for agricultural teachers at the VATAT, I realized that I really wanted to

become one. So, I took the next step in my career evolution, and I completed my preservice training at another southwestern university and student taught at a rural Texas high school. I regard my time at the other southwestern university and Texas high school as some of the happiest moments in my life. I had an amazing experience getting ready to teach, but once I took on my first real teaching job, I found that I was vastly underprepared to handle the challenges of a room full of students who came from different walks of life, spoke different languages, and had varying levels of intelligence. I knew how to develop a lesson that met the objectives I wanted to teach, but I didn't know the first thing about how to modify my lesson for individual students when it was needed and required by law, I might add. I didn't know what an IEP was, and I had never attended an ARD meeting. Special education was an area that I learned about "on the job."

However, that was over 15 years ago and the climate of education has changed. Since then, No Child Left Behind (2001) was put into place, and the Individuals with Disabilities Education Act (2004) has been reformed significantly. Both of these pieces of legislation called for special education students to be taught in the least restrictive environment, tested on grade level, and held to the same educational standards as their peers. Out of this came differentiated instruction and inclusion, two terms that were not part of my preservice training at all.

Once I entered into teaching, my experiences became as diverse as the populations I began to teach. Although I was trained as an agricultural science teacher, my first year of teaching was actually in eighth grade science and speech. From there, I

was an agricultural science teacher for six and a half years, and during that time I was often asked to step out of my field and teach core curriculum classes such as junior high science, integrated physics and chemistry, and biology. Wishing to further my education, I began work on my PhD at the land grant institution, where I served as a lecturer for a year and half, teaching classes and supervising student teachers, and for the past five years, I have taught primarily special education at the junior high and elementary levels.

My experience is very unique, as I have literally taught every educational level from four-year-olds to adults in college. I have taught core curriculum, career and technology, and special education. I have a unique perspective on differentiated instruction and the use of inclusion in public schools, and it is this unique set of experiences that I am drawing on to help guide me through my research.

Conceptual Framework

The conceptual framework for this study is program theory evaluation. When faced with answering questions regarding a program's effectiveness, value, and worth, program evaluation is utilized under the concept that good evaluation is an essential part of a good program (Fitzpatrick, Sanders & Worthen, 2004). Evaluation is defined as the use of "inquiry and judgment methods, including : (1) determining standards for judging quality and deciding whether those standards should be relative or absolute, (2) collecting relevant information, and (3) applying those standards to determine value, quality, utility, effectiveness, or significance." It leads to recommendations intended to optimize the evaluation object in relation to its intended purpose(s) or to help

stakeholders make determinations about the program (Fitzpatrick, Sanders & Worthen, 2004, p. 5). The basic purpose of evaluation is to determine the worth or merit of whatever program is being evaluated.

One of the basic premises of evaluation is that it is utilized to render judgments about the value of a program by providing information for program improvement, encouraging "meaningful dialogue among many diverse stakeholders," and providing oversight (Fitzpatrick, Sanders & Worthen, 2004). The use of program evaluation to examine the effectiveness of educational programs dates back to the 1840s and Horace Mann's examination of Massachusetts' public education system. Today, program evaluation is still used in education. It is used as a periodic measurement of program performance (Fitzpatrick, Sanders & Worthen, 2004).

Definition of Terms

The following terms will be found throughout this dissertation and are defined by the United States Department of Education (2013):

Least restrictive environment: In general, to the maximum extent appropriate, children with disabilities, including children in public or private institutions or other care facilities, are educated with children who are not disabled, and special classes, separate schooling, or other removal of children with disabilities from regular educational environment occurs only when the nature or severity of the disability of a child is such

that education in regular classes with the use of supplementary aids and services cannot be achieved satisfactorily

Special education: according to the United States Department of Education (2013) special education is defined as specially designed instruction, at no cost to the parents, to meet the unique needs of a child with a disability, including—

(i) Instruction conducted in the classroom, in the home, in hospitals and institutions, and in other settings; and

(ii) Instruction in physical education.

(2) Special education includes each of the following, if the services otherwise meet the requirements of paragraph (a)(1) of this section—

(i) Speech-language pathology services, or any other related service, if the service is considered special education rather than a related service under State standards;

(ii) Travel training; and

(iii) Vocational education.

Specific learning disability-The child does not achieve adequately for the child's grade level or to meet State-approved grade-level standards in one or more of the following areas, when provided with learning experiences and instruction appropriate for the child's age or state-approved grade–level standards:

- Oral expression.

- Listening comprehension.
- Written expression.
- Basic reading skills.
- Reading fluency skills.
- Reading comprehension.
- Mathematics calculation.
- Mathematics problem solving.

Vocational education: organized educational programs that are directly related to the preparation of individuals for paid or unpaid employment, or for additional preparation for a career not requiring a baccalaureate or advanced degree

Organization of Chapters

This study is organized into seven chapters. The first chapter served as an introduction to the study and its significance. Chapter two is a review of literature, chapter three explains the methodology of the study, and chapter four introduces readers to the participants of this study. Chapter five is the results chapter that examines the interviews that were conducted. Chapter six discusses the themes that emerged from this study. Chapter seven contains conclusions, discussion, and recommendations.

CHAPTER II

REVIEW OF LITERATURE

Teacher preparation is not a single event, and thus, to accurately study it, one must look at each component that makes up the teacher preparation experience. Therefore, an examination of teacher preparation will include sections on preservice teacher training, agricultural science teacher training and needs, and teaching students with disabilities in an agricultural science classroom.

A second section will examine the current climate in education and focus on beginning teachers, differentiated instruction and inclusion. During this section, a focus on current literature and studies influencing today's educational climate will be discussed.

Teacher Preparation

A preservice teacher is defined a person who is actively engaged in a teacher education program with the intention of becoming a prekindergarten through twelfth grade teacher (Collins, 2003). In a 2001 study of the needs of preservice teachers, the researchers stated that in today's modern educational world, with its reform movements and political policy agendas shaping it, teachers not only need to be experts in more than one field, but they also must be able to face and handle the challenges of a growing diverse population of students who come from multicultural, multilinguistic, and multiability needs (Young, Grant, Montbriand & Therriault, 2001).

Strong teacher education has been seen as the answer to providing a high quality workforce that some see as the answer to our nation's prayers with regards to social and economic woes (Levine, 2006; Craig, 2013); however, according to Levine (2006), our country is divided about which changes need to be made (Craig, 2013).

"As philosophical and legislative conceptualizations of appropriate education for students with special needs have evolved, so too has the need for teacher preparation that is responsive to emerging mandates and initiatives," (Jung, 2007, 110). American teacher education has traditionally been driven by "supply and demand" and shaped by current issues (Craig, 2013). Teacher education has evolved over the years but as theoretical gains occurred a growing disconnect emerged between what happens in teacher education and what happens in real-life schools (Craig, 2013).

The practice of training students to become teachers has undergone many changes over the decades, and training the teaching force is referred to as a lengthy process that should be filled with high-quality learning experiences based on proven, sound theoretical principals. This preservice program should also allow time for applying these theoretical principals as well as having time to reflect on one's own learning (Young, Grant, Montbriand & Therriault, 2001). "Preservice teacher-education programs play a significant role in the preparation of a highly-qualified workforce, which is necessary for the development of a complex 21st century society," (Young, Grant, Montbriand & Therriault, 2001, p.1).

Shulman (1998) writes that there is a distinct difference between a "profession" and training "professionals." Training professionals, he contends, is challenging, and

what Shulman goes on to state is that there are at the very least six characteristics of a profession that set the terms for the challenge of educating professionals (Shulman, 1998). Those six characteristics include the obligation of service to others, or a "calling," understanding of a scholarly or theoretical kind, a domain of skilled performance or practice, the exercise of judgment under conditionals of "unavoidable uncertainty," the need for learning from experience, how theory and practice interact, and finally, a professional community to "monitor quality and aggregate knowledge," (Shulman, 1998, 516).

The National Council for Accreditation of Teacher Education in 2002 set new goals for the training of preservice teachers to meet the new standards and trends in educational reform movements (Michalsky & Schecter, 2013). Among many of the new focuses of teacher education is self-regulated learning (SRL), which is noted as being highly effective among high-achieving students; furthermore, the goals of the council also maintain that teacher preservice training should not be limited to simply transmitting subject-matter knowledge and pedagogical knowledge using "predefined, fixed methods, but rather should find ways to construct knowledge through SRL, thus applying higher order thinking skills" (Michalsky & Schecter, 2013, p. 60).

According to a study by Ronfeldt and Reininger (2012), the National Council for Teacher Accreditation of Teacher Education reported that more emphasis is being placed on clinical experience, including student teaching, as a key component of teacher preparation (NCATE, 2010; Ronfeldt & Reininger, 2012). Within the United States, there is a substantial amount of variation in how practice teaching experiences are

designed (Ronfeldt &Reininger, 2012). On the average, student teaching is done toward the end of preparation after coursework has been completed (Ronfeldt & Reininger, 2012).

In the United States, preservice programs are divided into coursework, which includes early field experience, and then finally, student teaching. Field experiences are often referred to as methods or observations, where the preservice teacher visits a cooperating school and observes a mentor or "cooperating" teacher. The preservice program then concludes with what is commonly referred to as "student teaching." Student teaching allows the preservice teacher to lead-teaching responsibilities while still under the guidance of the cooperating teacher (Ronfeldt & Reininger, 2012).

"In nearly every form of professional education, students perceive the practicum experiences as truly valuable, while barely tolerating the academic experiences," (Shulman, 1998, 517). However, as Shulman goes on to explain, "a theoretical, empirical, and/or normative knowledge base is critical to all professions," (1998, 517). In other words, every profession must begin with a good foundation of knowledge, and that knowledge of theoretical principals is delivered in the courses that universities deem necessary to adequately prepare preservice teachers.

Teaching theory gets its power through the simplification and narrowing of a field (Shulman, 1998); therefore, teaching specific education theories about learning helps to narrow down what courses should be taught and why. However, professional educators tend to hold quite different ideas of good practice than do field-based professionals (Shulman, 1998).

Student Teaching

Based on literature from as far back as 1967, one of the purposes of student teaching is to allow the preservice teacher to orient themselves to the "world of school," (Purpel, 1967). During this period, the preservice teacher is allowed to rehearse the role of the teacher and gain an insight into the daily school activities. The second purpose is for the preservice teacher to develop their own individual teaching style (Purpel, 1967). More recent studies support that model today. In fact, the student teaching experience is the most widely utilized way that colleges and universities link education teaching and learning theories to the reality of daily classroom practice (Bacharach, Heck & Dahlberg, 2010).

"The notion that formal professional knowledge is rooted in an academic knowledge base creates the conditions for the essential pedagogical problem of professional education," (Shulman, 1998, 517). Just as students must learn the theory, they must also have the opportunity to put that theory into practice.

The length of student teacher varies from program to program; however, in the United States, it is typically a semester in length (12-15 weeks). This can vary based on the institution, the certification level, the degree type, and the preparation route (Ronfeldt & Reininger, 2012). Factors that are seen as having effects on the student teaching experience are related to "quality" of the student teaching experience rather than the "quantity" or length. The field placement, cooperating teacher, and university supervisor's frequent visits and feedback were noted as having influence on student teachers' experiences in the field (Ronfeldt & Reininger, 2012). Cooperating teachers

were seen as having the strongest influence on preservice teachers' attitudes and learning during their student teaching experiences (Ronfeldt & Reininger, 2012).

Student teaching should be designed in such a way that the practice is accompanied by intensive supervision to "ensure the acquisition of need skills and the demonstration of behavior, manner, and values," (Shulman, 1998, 518).

The student teaching block can also have effects on teacher self efficacy as outlined in a 2006 study by Roberts, Harlin, and Ricketts, found that agricultural science student teachers at Texas A&M University self efficacy actually changed throughout their student teaching semester. At the beginning of the block phase of the semester, student teachers had high self-efficacy, but through the actual student teaching experience, their efficacy began to decrease. However, by the end of the experience, self-efficacy had risen again (Roberts, Harlin & Ricketts, 2006).

Interestingly, the study noted that the student teachers were least efficacious with regards to student engagement (Roberts, Harlin & Ricketts, 2006). The authors of the study explain that given the complex nature of the interacting with a diverse group of youth while at the same time being a novice teacher focused on the mechanics of teaching and classroom management, it is reasonable to expect efficacy in student engagement to be slightly lower than other constructs.

Kamens and Slostad (2000) stated that during their experiences as teacher educators and student teacher supervisors, they were often observers of responses from classroom teachers related to inclusion, and some of those teachers were excellent models of what to do. Others, however, were overwhelmed and vented their frustrations

about not having enough support and preparation for teaching students with disabilities (Kamens & Slostad, 2000). Therefore, the need to place student teachers with classroom teachers who are good practitioners of differentiated instruction and inclusion is imperative if that student teacher is to have the best possible experience. Another aspect to the cooperative teacher that the student teacher is placed with is that they are able to share valuable information with the university supervisor with regards to the knowledge, skills, and competencies new teachers need to effectively implement inclusive programs because they themselves are making those decisions about special needs students daily (Kamens &Slostad, 2000).

Agricultural Education Preservice Programs

Preservice agricultural education teaching programs have the added challenge of preparing teaching candidates to have a working knowledge of agricultural science. How content specific teachers represent subject matter (activities, examples, analogies, materials, etc.) used in teaching is the product of weaving understanding of the specific academic discipline together with knowledge of learners, learning, and the context (McDiarmid, 1989). Preservice programs must help future teachers understand how to relate the content-specific material to the learners (McDiarmid, 1989).

The preservice program is not just charged with presenting content, but it is seen as the vehicle, which can shape one's personal philosophy. Preservice programs are critical in the shaping and formation of teacher beliefs and/or attitudes (Jung, 2007), and if training does influence one's perception on his or her abilities to work with special

needs students, then an increase in requirements for teaching might be required (Jung, 2007).

Curricular structure differs widely among agricultural education program, and because of this, it is impossible to build a single set of commonly taught classes, but nearly all of the agricultural science education programs have been found to have a special methods course, program planning courses, and student teaching through their own departments (McClean & Camp, 2000). No matter the structure of the program, however, the preservice pedagogical design should help to afford "eased entry into practice" (Shulman, 1998, 518), and just as general education teacher preparation programs have been called to reform, so have agricultural education preservice programs (McClean & Camp, 2000).

Also, to keep up with emerging technologies, legislation, and generational change, teacher education training must also reevaluate the content that they deliver (Ricketts, Duncan, Peake, & Uesseler, 2005). Teacher education programs for agricultural also must address program competencies unique to the total program of agricultural education, and with this, teaching future agricultural science teachers about understanding the tasks occupying their time could lead to a "better understanding of the roles the teacher must fulfill as well as the time consumed by each role, leading to lower stress and higher job satisfaction," (Lambert, Henry & Tummins, 2011, 50).

Current Climate in Education

The current climate in education has greatly been shaped by No Child Left Behind (2002), the Race to the Top Program (2009), and Common Core Standards (2009). The emphasis on least restrictive environments has forced teachers to adapt new concepts for teaching, and the effects of this weight most heavily on the those just beginning in the field. A closer look at beginning teaches, changing attitudes toward special education students, which includes differentiated instruction and inclusion, and finally, agricultural science and the special needs student will help to paint a picture of today's secondary classroom.

Also, the Race to the Top initiative has brought about controversy with regards to public education. In the book, *Left Behind on the Race to the Top: Realities of School Reform* (Gorlewski & Porfilio, 2013) the authors dissect the initiative and point out all of its over-testing and school choice issues. In an opinion editorial, veteran teacher Jessica Kerber (2014) states, "The new Educator Evaluation System, paired with the Race to the Top guidelines, has put a stress on the entire teaching profession and I can personally say that the EES has pushed me to my breaking point."

Beginning Teachers

Newcomers to teaching face many challenges, and these challenges are especially difficult for these newcomers who are frequently left to "sink or swim" in isolation. It has been commented that those newest to teaching end up with the most challenging and difficult classrooms summed up as "trial by fire," and teaching has also

been accused of "cannibalizing its young," (Ingersoll, 2012, 1). Teachers also experience many stressors such as working with unmotivated students, classroom discipline, workload and time demands, poor working conditions, and challenging relationships with colleagues and administrators (Kyriacou, 2001 as cited in Lambert, Ball & Tummins, 2011). All teachers experience frustrations throughout their careers, but concerns and frustrations may be more intense during the first year experience (Fritz & Miller, 2003).

According to Shulman, good teaching has four main dimensions that must exist concurrently. Those dimensions are intellectual, practical, emotional, and moral (Shulman, 2007). Beginning teachers must have a good induction program to help them develop these skills, yet most schools do not offer adequate induction programs to help them grow in these areas (Ingersoll, 2012).

As research suggests, first year teachers deal with a variety of issues specific to the experience of being a first year teacher. Central issues of first year teachers include time management issues, lack of experience in general, frustration, and emotional issues. First year teachers are often reflecting on their own inadequacies and questioning their abilities (Shoffner, 2011). According to Eckola (2007), first year teachers have an induction process with a series of highs and lows. Add to that, the fact that beginning agricultural science teachers receive little support with regards to their programs (Greiman, Walker & Birkenholz, 2002), and beginning agricultural science teachers must train teams, supervise SAEs, prepare for classes, manage student and parent relationships, as well as be an FFA advisor (Edwards & Briars, 1999; Roberts & Dyer,

2002; Fritz & Miller, 2003). These teachers must also be responsible to promote their total program, and a 2005 study of agricultural science teachers in Georgia found that all of the competencies needed to run a total program were considered important (Ricketts, Duncan, Peake, & Uesseler, 2005).

According to McAdoo (2013) the Department of Education hired 3,818 teachers in 2011–12, which was almost 600 more than it hired in the previous year, but of those new hires, 354, or 9.4 percent, quit even before their first year was complete. This is compared with previous first-year quit rates of 7.8 percent. McAdoo also notes that "the four-year quit rate is also increasing. More than one-third of the 5,000-plus new hires from 2008–09 are now gone from the schools, reversing what many had hoped was a declining attrition trend," (McAdoo, 2013, 1). Teacher attrition has grown by 50 percent over the past 15 years (Carroll, 2007). The cost of this teacher turnover is over $7 billion a year (Carroll, 2007). In fact, between 40 and 50 percent of new teachers leave within the first five years of teaching, and attrition rates among first year teachers has increased one-third in the past two decades (Ingersoll, 2012).

New agricultural science teachers also are expected to take on a full schedule of classes while creating and teaching their own lesson plans. They also must develop effective teaching tendencies and classroom-management strategies while also assuming the role as FFA advisor, traveling with students to competitions, overseeing student activities, and visiting with students outside of class in regard to Supervised Agricultural Experience (SAE) visits (Hartfield, 2011). Furthermore, the greatest effect on agricultural science teacher self-efficacy was the number of class preparations the

teacher was responsible for and the perceived excellence of the student teaching experience (Whittington, McConnell, & Knobloch, 2006).

The best way to combat teacher attrition, according to the report "The High Cost of Teacher Turnover," is to support new teachers when needed. This same report found that comprehensive approaches to teacher induction could reduce teacher turnover by more than 50 percent (Carroll, 2007). One of the least effective strategies was using mentor or "buddy" teachers because these teachers are often times not trained on how to mentor. Also, they oftentimes only make the occasional visit (Carroll, 2007).

"Developing confidence in one's ability to teach special learners is not only important for special educators, but also for general education teachers," (Jung, 2007, 106). A 1997 study by Center and Ward found that teachers' attitudes toward integrating students with disabilities reflected a lack of confidence in both their own instructional skills (Jung, 2007).

According to Darling Hammond (2010), there is a long-standing disconnect between teacher preparation programs and what actually happens in schools. This is also referred to as the practice transfer problem (Craig, 2013). Claims for knowledge must pass the ultimate test in practice (Shulman, 1998).

In a study looking at newly hired teachers, the confidence level of those teachers when teaching students with special needs showed that training and support were key factors in success with special learners (Chester & Beaudin, 1996; Jung, 2007). Teachers who suffer from low self-confidence are more likely to refer to special needs as difficult to teach (Jung, 2007). The new role of the general education teacher has also demanded

a need for more understanding of students with special needs (Brown, Welsh, Hill & Cipko, 2008).

In a 2008 article by Brown et al, several studies were cited that found that teachers today often lack the preparation and experience in dealing with students with special needs (Avramidis, Bayliss & Burden, 2000; Burke & Sutherland, 2004), exhibit poor attitudes toward the idea of inclusion in general (Daane & Latham, 2000; Lorann & Bambara, 2006), and are restricted by inflexible course material (Pisha & Stahl, 2005) that according to the article, led to an inability to adapt instruction and assessment techniques to meet the needs of their students (Brown et al, 2008).

Changing Attitudes Regarding Special Education Students

Approximately 50% of students with disabilities spend 80% of their day in general education classrooms, and at a time when education is dealing with issues of reform and a "heightened focus" on accountability, inclusive education presents a growing challenge for teacher education (Brown, Welsh, Hill & Cipko, 2008, 2088).

Differentiated instruction is a method of instruction designed to recognize students varying background knowledge, readiness, language, preferences in learning, interests; and to react responsively. Differentiated instruction is a process to approach teaching and learning for students of differing abilities in the same class. The intent of differentiating instruction is to maximize each student's growth and individual success by meeting each student where he or she is, and assisting in the learning process (Hall, Strangman & Meyer, 2009).

Every teacher should be able to solve problems and understand students' individual needs (Young, Grant, Montbriand & Therriault, 2001). The 21st century educator is faced with a changing student population. Children from poverty and second-language backgrounds will continue to escalate (Young, Grant, Montbriand & Therriault, 2001).

Differentiating successfully is done when a teacher knows the direction in which he/she is headed and has an understanding of the essential leanings for the lesson (Tomlinson, 1999). In agricultural education, teachers are experiencing increased student diversity within their classrooms (Stair, 2009). Since the passage of the Individuals with Disabilities in Education Act (IDEA), the total population of students served under this legislation has risen from 5% in 1976 to 8.6% in 2006 (Stair, 2009). According to Stair (2009), many teachers are not specially trained to work with students with disabilities. This lack of training can result in a decrease in job satisfaction and increased stress for teachers (Stair, 2009). However, to remain in compliance with these regulations, educators need more information and positive attitudinal perceptions to effectively develop, implement and maintain inclusive classrooms (Kamens, Loprete & Slostad, 2000).

"Students with differentiated learning needs increasingly receive education in total inclusion programs that tax general education teachers who lack the skills necessary to teach them well. Inclusion requires that the general education classroom teacher possess skills that were once the purview of the special education teacher alone," (Dee, 2011, pp. 53-54).

"With the more recent emphasis on educating an increasing number of secondary students with exceptional needs in inclusive environments and including all students in state assessments, both general and special educators are asking important questions about the feasibility of and responsibility for providing individualized instruction in the general education classroom. Differentiated instruction provides a platform for accomplishing this," (Van Gardener & Whittaker, 2006, p. 12).

One study found that the lack of successful inclusive education in schools is directly related to the lack of "well-aligned inclusive preparation in universities," and teacher education preservice programs play a role in how well prepared teachers are for handling an inclusive classroom (Young, 2011). General education teachers have reported that teacher education programs are not preparing them to be successful in inclusive classrooms (Brown et al, 2008). Also, in this study, it was reported that teachers' confidence levels are raised when they are exposed to inclusion in the classroom during their preservice training programs (Brown et al, 2008). To meet this need, university programs must change their current systems to help prepare teachers to meet the challenges of teaching special education students in an inclusive classroom.

If our agricultural education programs truly welcome all students, increased efforts are needed to at least help student teachers feel more confident in developing lessons that include all learners, specifically the learning disabled (Kessell, Wingenbach, & Lawver, 2009). Agricultural classes are noted for being very diverse, and many times agricultural interests, ability levels, maturity and home backgrounds of students in a single class differ quite a bit (Kessell, Wingenbach, & Lawver, 2009). "We should

become better leaders and practitioners of inclusive strategies for meeting the needs of special education students," (Kessell, Wingenbach, & Lawver, 2009, p. 60).

According to Dee (2011, pp. 53-54), "new general education teachers who enter the field are particularly vulnerable to the demands and stress of the profession, and exemplary preservice teacher education programs must prepare them to meet the needs of all students by teaching the skills to make appropriate lesson adaptations, accommodations and modifications."

Another study found that agricultural science teachers are using recognized practices in their classes though they are more likely to use practices that impact students as a whole or are easy to use rather than individualized strategies for students with special needs (Stair, 2009). This research also showed that teachers feel they are able to provide quality instruction to learning disabled students, however they generally disagreed that their teacher-training program prepared them to work with students that had disabilities (Stair, 2009). Adapting instruction and making modifications to content for special education students often represents a new skill set for veteran teachers and a foreboding challenge for new and preservice teachers (Dee, 2011).

Agricultural Science Teachers and Students with Special Needs

Agricultural science teachers need help to deal with the varying learning styles and abilities in their rooms. Because the curriculum is hands-on and often deals with safety issues, understanding to what extent and how to involve special education students is critical because differentiating for the benefit of providing the highest quality

education for the learning disabled to help secure future employment for our students (Moffitt, 2004).

According to an article by Paulsen (2003, p. 10), "Agricultural Education instructors have had the benefit of utilizing the FFA and SAE components of a well-rounded Agricultural Education program to implement differentiated instruction for decades." Paulsen contends that agricultural science teachers experiences with SAE and FFA provide the background needed to be successful in the classroom as well (Paulson, 2003). As early as 1991, the United States Department of Labor was calling on vocational education to meet the needs of an internationally competitive workforce for the future (McClean & Camp, 2000).

Differentiated classroom instruction is considered "a new strategy to many teachers, might feel a little bit uncomfortable to us at first," but as agricultural education teachers begin utilizing differentiated instruction and realizing it is for the benefit of all students then learning can only be enhanced (Paulsen, 2003, p. 11). Agricultural education instructors with practical experience in the differentiation of instruction have a responsibility not only to implement scientifically researched strategies in their classrooms but also to encourage and support each and every teacher in our local school building to do the same (Paulsen, 2003).

Also, research and current beliefs surrounding inclusion and differentiation in the area of teacher education may lead to effective changes in methods and strategies as well as in required course work in teacher preparation programs, and preservice teachers must develop the skills required to meet the needs of special populations of students (Dee,

2011). Furthermore, research in the area of preservice teacher preparation states that in the areas of inclusion, students with disabilities, and differentiation adequate preparation is still deficient (Dee, 2011; Andreasen, Seevers, Dormody & VaLeeuwen, 2007). According to Dee, (2011) preservice teachers have an undeveloped or inaccurate understanding of special education and its terminology. Developing confidence in one's ability to teach special learners is not only important for special educators, but also for general education teachers.

New Mexico agricultural education researchers concluded that knowing what inclusion competencies and special education teaching skills to strengthen was essential to improving the preservice agricultural education program at New Mexico State University (Andreasen, Seevers, Dormody & VanLeeuwen, 2007). To quote Pense, Watson, and Wakefield (2010), "employing an inclusive strategy in the classroom invites SLD (specific learning disabled) students to join society rather than feel ostracized due to labeling of their specific learning issues."

History of the Program

A thorough examination of the preservice agricultural science preparation program at the 1876 land grant institution was vital in order to complete the study. During the time when all four subjects attended the institution, they had taken many agricultural science classes in the areas of plant science (required 9 hours), animal science (required 9 hours), agricultural systems management (required 9 hours), and

agricultural economics (required 6 hours). The subjects also all had an option of 6 to 7 hours of agricultural science electives.

Students who had completed the program during this time also had to complete 18 hours of professional education requirements. These are the classes that are designed to prepare the preservice agricultural science teacher candidates to develop lesson plans, manage an FFA program, understand student learning and best teaching practices, and how to reach a diverse population of learners. The subjects were all required to take three hours of educational psychology, which is designed to teach its students about the application of psychology to problems of teaching. According to the degree plan, this is to be taken alongside with an introduction to agricultural science teaching class. This class is an overview of the secondary teaching experience. It is designed to prepare future teachers for a changing world including knowledge of learners, knowledge of subject matter, and knowledge of teaching within the context of agricultural science.

An education course is required that is designed to prepare preservice teachers for special populations including physical, cognitive and affective characteristics; cultural, ethnic, economic and linguistic differences; giftedness; special education and compensatory programs; and awareness of legislative history that results in rights for special populations. The syllabus for this particular course specifically mentions IEPs and IEP development, special education laws, understanding students with learning disabilities, understanding students with emotional and behavioral disturbance, students with ADHD, and students with autism.

There is also a clinical experience class, and the students are required to conduct observations in specific areas. Those areas are in special needs, some in general education classrooms, and some in agricultural science classrooms. This course is taken a year or more before students student teach to help them when they begin lesson plan development in their agricultural education class.

Finally, there are two agricultural science education courses in the degree plan that address teaching and learning specifically for agricultural science teachers. These courses are designed to be taught together back to back in fifty minute blocks. The first course is the course that students take to learn lesson plan development, effective planning and delivery methods, and assessments. This course also has an added component of inclusion and dyslexia instruction. According to the instructor of this course, the lesson plan portion of this class has been updated based on the lesson plan requirements at an actual local school district to make it more meaningful. The second course is a three-hour class taught to prepare preservice teachers for the complete agricultural science program. This class focuses on the aspects of being an FFA advisor and supervising SAEs. It includes activities that simulate filling out record books and attending actual FFA events.

The final component of the preservice program is the student teaching block and student teaching. At this particular land grant institution, students must apply for student teaching placements but are ultimately placed by a committee of university faculty. Once placed they are required to visit that school for one week prior to student teaching,

followed by two weeks of intense on campus preparation, and then finally twelve weeks at the selected placement.

According to a professor within the agricultural science department of this institution, most of the agricultural science preservice candidates (70%) come in to the program as juniors and that number could be as high as 80%. “Essentially we get maybe 3 semesters plus student teaching. Their course availability is even more limited. I’m down to half a degree program and a quarter of that is student teaching, so we’ve really only got 3 semesters to get them where they need to be prior to student teaching.”

This professor also said that many changes to the agricultural science program have been made since the subjects for this study graduated. “I would say that when you look at where we were in 1999 to where we are now we are leaps and bounds better, but we still can do more.”

CHAPTER III

METHODS

Introduction

The following chapter explores the methodology and procedures used in conducting this study. It is divided into the following sections: introduction, research question, discussion of the selection of the methodology, selection of participants, interview protocol, data collection, managing and recording data, trustworthiness, data analysis, and limitations of the study.

Research Design

When choosing the research design for this study. Several factors were taken into consideration. First and foremost, it was decided that in order to investigate and understand the experiences of those involved in the preservice agricultural education program, a qualitative study would allow the researcher to delve into the individual experiences of those involved. Most importantly, this method of research would allow the researcher to ask specific questions for clarification, and this method would also allow the participants to use their voice in explaining and sharing how they viewed the preservice program.

Previous quantitative studies by Kessel, Wingenbach, and Lawver (2009) found that students in a preservice agricultural education programs did not feel adequately prepared to face the challenges of teaching students with special needs. Because of the previous quantitative studies outlining a need for further research, it was decided that

further study using a qualitative method was needed in order to fully understand the needs of preservice agricultural science teachers with regards to special needs students.

This is in line with Creswell's research design in that the previous quantitative study posed a research problem that led to this study (2014). As Creswell indicates, a new research problem comes from a void in the literature. Because there have been no qualitative studies to share the voices of the preservice teachers, it was deemed necessary to further explore this topic utilizing qualitative methods.

Research Question

There was one research question that guided this study. What were the voices of agricultural science teachers regarding their preparation to meet the needs of special education students in agricultural science classrooms?

Discussion and Selection of the Methodology

According to Creswell (2014), qualitative inquirers use theory in their studies to help provide a theoretical lens through which to provide an overall orienting lens for the study. This lens becomes a "transformative perspective" (2014, p. 64) that shapes and guides the formation of the research question. It also informs how the data is collected and analyzed, and it provides for a call to action or change.

During a qualitative study, the researcher begins by gathering detailed information from participants and then analyzes this data to form themes. The themes are then developed into broad patterns, theories, or generalizations that are then

compared with either personal experiences or with existing literature (Creswell, 2014.) This particular study would use the latter and compare these themes to existing literature.

Because this study utilized qualitative case study methodology, I chose to use interpretive phenomenological analysis (IPA). IPA was applied in order to allow the researcher to gain knowledge about participants' experiences of going through the preservice agricultural education program at the land grant institution and whether the program helped prepare them for the challenges of applying differentiated instruction in their classrooms and teaching special education students (Merriam, 2009). I also wanted to examine the assumption about the essence or essences of the shared experience, which in this case is the shared experience of going through the land grant institution's preservice agricultural science degree plan (Merriam, 2009).

The aims of IPA research tend to focus on people's experiences and/or understandings of particular phenomena. Research questions are grounded in an epistemological position. With IPA, the assumption is that data can tell something about people's involvement in and orientation towards the world, and/or about how they make sense of this (Smith, Flowers & Larkin, 2009). "The primary research questions in IPA are directed towards phenomenological material: they focus upon people's understandings of their experiences" (Smith, Flowers & Larkin, 2009, p. 47).

Research questions are also open-ended, and not closed, such as yes/no or true/false. They may be focused on the process, rather than the outcome, and they will focus on the meaning of events (Smith, Flowers & Larkin, 2009). The guiding research

question for this study was: What were the voices of agricultural science teachers regarding their preparation to meet the needs of special education students in agricultural science classrooms?

Selection of Participants

After seeking and receiving IRB approval, a purposive sample was derived using information about those graduates who met the study's guidelines. From this list, five potential participants were selected. Via telephone calls and emails, four out of the five originally selected candidates agreed to participate, and a time and location was set up to meet with them individually.

Each interview began with the same question, "Tell me a little bit about yourself." It was during this first portion of the interview where the subjects shared with me what they considered to be important characteristics about themselves. Each candidate had something unique to say; although, there were some very common comments from each one. At the end of each interview, each participant was asked to describe their classroom, and also, they were asked if they had any final concerns.

Table 1 has been included to provide key information about each participant including their ethnicity, their gender, and their years teaching. Each person's "name" is a representation of their personality and allows the reader insight into that individual's personality so that as one reads their comments, it is easier for the reader to better know each participant.

Table 1

General Characteristics of the Participants

Name	Ethnicity	Gender	Years Teaching
Studious	White	Female	3
Ms. Confident	White	Female	2
Structured	Hispanic	Male	2
Brief	White	Female	2

Sampling must be done purposively because the sample must offer insight into a particular experience. Participants are selected on the basis that they can "grant us access to particular perspective on the phenomena under study. That is, they represent a perspective, rather than a population" (Smith, Flowers & Larkin, 2009, p. 49). IPA researchers try to find a homogenous sample who can meaningfully answer the research questions. In this case, our sample will consist of current agricultural science teachers who have completed preservice agricultural education training at the land grant university within the last two to three years.

The reason for choosing this specific demographic was two-fold. The first major reason was based on beginning teacher research from the review of literature, first-year teachers have their own issues that are inherent to simply being new to the profession. Second, this study needed participants who had not been away from the program for so long that they could not adequately remember details about coursework and experiences.

Interview Protocol

IPA also requires a verbatim record of the entire data collection event. Data collection recordings can be done by recording either on audio media or video media, and the consent of the participants in required (Smith, Flowers & Larkin, 2009). In this particular study, data was collected using a hand-held recording device.

Creswell also suggests having an overall outline or a general structure for topics that will be included in the protocol. Also suggested during the interview, is to not disturb the research site. This simply means not intruding and interrupting the flow of daily activities as little as possible. This was achieved by meeting with participants during the summer so as not interrupt classroom preparations and daily activities (Creswell, 2014).

Creswell also states that all participants need to receive the same benefits. Both the researcher and the participant need to benefit from the study. This was achieved by explaining the purpose of the study to each participant prior to each interview, asking permission to interview them, and then, meeting with them at their desired location. Also, the participants were told that their responses would help future preservice agricultural science students with regards to views of the program. This allowed the participants to share more of a role in the study. They were also asked to approve their interview transcripts which again allowed more of a beneficial involvement in the study (Creswell, 2014). By sharing the purpose of the study, the researcher was also meeting Creswell's research design protocol by not deceiving participants (Creswell, 2014.)

Creswell (2014) also insists that part of a qualitative protocol includes respect of power balances. Interviews need to be conducted in a way that improves the human situation. In this case, the interviews will lead to the formation of themes that will thus lead to recommendations about the preservice program. Creswell also states that part of the protocol is not to exploit participants. They need to share in how their interview responses will be interpreted and the consequences of the interview. Finally, interviewers need to avoid collecting harmful information. This might include intimate information about the participants that would invade their privacy.

Data Collection

Semi-structured Interviews

Each participant was interviewed during the summer prior to the beginning of the new school year, and each participant was shown the voice recorder and made aware that their responses would be recorded. They were also told the purpose of the study prior to the interview beginning. Each participant was asked the same basic four questions, but from each interview, other open-ended questions or clarifying questions emerged as a natural progression of the interview.

The Interviews

The four questions that were asked of each participant in the study were: 1) Tell me a little bit about yourself? 2) What types and numbers of students and experiences do you have with students with special needs? 3) How did your preservice program prepare you about differentiated instruction, IEPs, and modficiations/accommodations? and 4)

What other experiences or lessons did you learn during your preservice program to help you in your current teaching assignment?

Each interview varied in length, and no two interviews were alike. The interviews ranged in time from 45 minutes to an hour and 33 minutes.

Managing and Recording Data

After all the participants were interviewed, the interviews were sent to an independent transcriber who transcribed each interview verbatim from the voice recorder. Once the researcher received each transcript, the participants were emailed a copy of their interview and asked for approval. All participants gave their approval of their transcripts.

Trustworthiness

IPA data analysis was employed when reviewing all participant transcripts. IPA protocol includes a set of common processes and principles as prescribed. The first step is reading and re-reading. This requires that the researcher be immersed in data and read purposively so that the process of entering the participant's world is achieved. Repeated reading also allows for a model of the interview structure to develop (Smith, Flowers & Larkin, 2009). Second, IPA calls for initial noting. Third, the investigator develops emergent themes, and the fourth step is searching for connections across emergent themes. The fifth step in data analysis is moving to the next case (Smith, Flowers & Larkin, 2009).

An audit trail was completed in order to detail how the data was collected and themes were established. This audit trail also includes an electronic journal that chronicles a running record of the researchers interaction with the data and a coding system that could be utilized to trace information back to the original sources (Merriam, 2009). In addition to the use of an independent audit, trustworthiness of the research is ensured by the use of peer debriefing (Berg, 2001). The peer debriefing memo is created and shared with an outside source to determine if the themes were accurate and truly reflected the raw data (Merriam, 2009). As information was gathered, memos were sent to my committee chair for review.

Triangulation was also used to ensure validity. Triangulation includes comparing information to other sources and using it to build a coherent justification for themes (Creswell, 2014, 201). In this study, the themes were developed by comparing each participants' responses. When common words were used, tally marks were made. This was done during all readings of the interviews. Based on the triangulation, three themes emerged by comparing each participants' responses that shared key words, phrases, and ideas. Constant comparative techniques were also used while reviewing each interview.

Finally, an external auditor was used to review the entire project. This external auditor was able to review the study, ask questions for clarification regarding data collection and procedures. This was done at the conclusion of the study. Having an external auditor enhances the overall validity of the qualitative study (Creswell, 2014).

Data Analysis

It was very important when analyzing data to check the transcripts for mistakes (Creswell, 2014). Because a contracted transcriptionist was used, I did find misspellings, incorrect words that needed to be corrected, and incorrect acronyms.

Following Creswell's data analysis design, data analysis occurred on two levels. First, a general method was used in analyzing the data. Because this study utilized phenomenology, "the analysis of significant statements, the generalization of meaning units, and the development of an essence description were used" (Creswell, 2014, 196). This involved generating categories and using axial coding, in this case tally marks, and then looking for emergent themes within the theoretical model (Creswell, 2014).

To explain more specifically to this study, data analysis used axial codes in the form of tally marks for specific words or phrases as they were mentioned throughout the interviews. The researcher listed the interview questions and then placed phrases and tally marks under each question. Then using triangulation, to compare each participant's responses, themes began to emerge.

In summary, following Creswell's research design, the data was organized and prepared for analysis by being transcribed and then read over to make any corrections to mistakes the transcriptionist might have made. Then, the researcher read over all of the interviews. The first reading was a general reading, followed by several re-readings. Next, I began coding the data by placing tally marks and phrases under each question presented during the interview. Using the coding process, I was able to generate categories or themes for analysis. Also, as emergent themes were identified, sub-themes

were also identified that also interconnected the themes and "built layers in the story line" of the research (Creswell, 2014, 200). A final component of the data analysis was to interpret the findings or results and see if they supported the literature. Also, interpreting the data lead to conclusions and recommendations for action and change (Creswell, 2014).

Limitations of Study

I acknowledge the following limitation of the study:

The number of participants in this study was limited to four. Because this is a qualitative case study, it was necessary to use a small number for our sample. However, I employed purposive sampling to ensure generalization to the larger population.

CHAPTER IV

PARTICIPANTS

This chapter will introduce the study's participants. As previously mentioned in chapter three, this study used a purposive sampling to identify potential subjects. This chapter will introduce each subject, how they will be identified throughout the results and conclusions, the information they shared about themselves in the interviews, and how they arrange their classrooms.

Introduction

The participants for this study were chosen because they fit the criteria as stated in the purposeful sample. Each participant had graduated from the land grant institution and had been teaching agricultural science for two to three years; however, as they did have that much in common, they were each very diverse in their own way. In the following chapter, each participant will be introduced using their own voice.

First Impressions

Participant One-Studious

The first participant, who shall be referred to as Studious, had to meet me outside of her building and flag me down. Navigating some of the rural schools can be quite difficult. As old high schools become renovated elementary and middle schools, some towns have a maze of school buildings to find your way through. Such was the case with

my first interview. I had to call her several times. It was just a few weeks before the new school year was to begin, and Studious was busy trying to get organized for the impending school year. As she flagged me down so that we could finally meet up, I was taken back by how young she looked. She also seemed so apologetic for the "mess" in her room. My first impression of her was of a young woman unsure of herself, hastily trying to prepare and yet feeling like she was never quite getting there. She was dressed casually, and in my opinion, was a pretty young woman. Being young and pretty can bring forth a whole other set of obstacles to overcome with teenage boys. That coupled with her palpable insecurity, made me want even more to begin my interviewing process.

Participant Two-Ms. Confident

Subject number two met with me the same day. I was able to locate her easily, and in this candidate, I found someone with much more tangible confidence; therefore, I shall refer to her as Ms. Confident. My first impression of her was of a very driven individual. She had a firm handshake, and a strong sense of self. She was at ease, but because she had recently changed school districts she was calmly trying to get everything into its rightful place. With her calendar always within arms reach, she was dressed casually and had on minimal make-up, if any at all. She had a very natural, earthy appearance. She struck me as someone who was all business.

Participant Three-Structured

Subject number three was the only male that I interviewed. I called him from the parking lot to meet me in the front lobby of the school. As he came up to introduce himself, he reached out and gave me a very firm handshake. He looked me in the eye and then showed me to his room. He was confident and self-assured. Even though it was summer and there were not professional development workshops going on or even students on campus, he was well dressed and his pants were starched with a tucked-in shirt. This was a young man that took himself very seriously, and even though he was in his early twenties, he came across as very mature and beyond his years. He will be referred to as Structured.

Participant Four-Brief

Subject number four was my only subject to meet me outside of her school. Because of availability, she elected to meet me in the lobby of the agricultural sciences building at the land grant institution. She was dressed casually, and she was very laid back. The impression she gave me was that she was a confident person in general, but when it came to teaching agricultural science, she was not as confident. Her demeanor along with her responses suggested that she had many insecurities when it came to teaching, and her most standard response was “no” to my questions. Therefore, I call her Brief.

Tell Me a Little Bit About Yourself

The first question I asked each of my subjects was to tell me about how they were as a student. I wanted them to share with me their educational background so I could gain more insight into their perspective. I also considered this to be a good "ice-breaker" and hoped it would put them at ease so they could feel more comfortable opening up and sharing their experiences. This was also very important to the IPA process as I needed to be aware of the hierarchy of their life experiences (Smith, Flowers & Larkin, 2009). From childhood to present day, how did they make sense of the world around them? What shaped them as individuals? There was only one way to find out.

Studious described herself as very studious. In both high school and college, she was very focused. She described learning as a priority to her. "And it was weird because I almost looked at tests as like a game. And I know that sounds crazy, but I'm also very competitive and so I saw it as a game and if I scored really well, I was winning the game." Her competitive nature was not something that her appearance would have given away about her; however, once our interview began, she discussed at length the teams she liked to train and how they were progressing each year. Yes, this candidate was indeed competitive and wanted to do her best as both as an FFA advisor and an agricultural science teacher.

Ms. Confident, when given the same question, went much more into depth. She graduated salutatorian from high school and said she was very academic. She said being academic could be difficult at times. "But because I'm academic I care very much so about my work, and I care about the product I put out. Which means I put in a lot of

time, a lot of effort, and I'm not satisfied just getting by. And I think it shows in my work as a teacher, too. I'm very organized. I have a calendar. I have everything on the days of the month." At this point, she picked up and showed me her calendar that was literally beside her at all times. She opened it up, and I saw that it was the type of portable calendar with large squares to write the days' plans out. Hers was filled with activities and deadlines even though school was still two weeks away. She went on to explain, "I have everything on the days of the month and then weekly. I have what I have to do. So, today I have 10 things to do, and three things are marked off. But, by the end of the day, seven things will be marked off, and I'll have twenty [more] things to do. And I can't function without that calendar. That's really important." Ms. Confident went on to explain even further. "So organization is very key to helping me accomplish what I feel like I need to accomplish. As a student I was very much [organized] so I liked doing things on my own because I could control the product. And it's control, I know. But if I worked on a team or a group I couldn't always control my team members and so…that bothered me because they don't put forth the effort and work that I put out. So I very much so like that individual work." She went on to say that in high school she took 36 credit hours so that by the time she reached the land grant institution she was already a sophomore and graduated within three years. She said her high school career was fast-paced; therefore, her college career was fast-paced. She was working on her master's at the time in the area of school counseling, and she was set to graduate within a year.

Ms. Confident shared the following story about herself to explain further how she was so driven and controlling. "When I was probably five and [with] my grandparents,

they still tell me this…when you were five you said, 'I want to read and I want to read right now.' And I'm like, okay, you guys, so what, that's no big deal, but they said, it was an encyclopedia that you brought to us. And so it's a joke in my family…I want to read, and I want to read right now. And so I think that's why I'm so fast paced when I do things and that's why I'm so driven because that's how I function."

As far as his personal learning style, Structured said that he is not as visual as so many students now seem to be in his estimation. He said that he found that interacting and forming relationships to be his best mode for learning. He said he did well with the human aspect of learning.

"If I can develop relationships with people in my classes and we could study together or work on something together whether in class, in a lab, or outside of class preparing for an exam or something like that, I was a lot more apt to really learn the information, retain it through that interaction, through those relationships…because when I would have to recall it I could think, oh, you know, Johnny and me talked about that, or we talked about this, or we did this together. That's what really helped me personally."

He said he tries to use that relationship forming skill with his students. He said, "Not all of them are that way. Some are really closed up, and they're not going to come out of their shell at all and you have to slowly chip away at them over the course of the year and maybe at the end of the year you'll get, you know, some kind of results."

He went on to say, "Teaching ag is something that not very many people understand. We're kind of a very small cult I could almost call it, you know? There are

very few of us, and if you're not involved in it you do not understand ag teaching at all. And so that makes it difficult I feel like because I mean even my own friends, you know, they may call me after school 'What are you doing? Why are you still at school?' You know, it's 6:30, 7:00 at night."

He says he tries to explain to those friends by saying things like, "Oh, well we have pigs to weight, we have a stock show, we have LDE practice."

Structured said, "And they just don't understand the extra duties, and so that's something that…can weigh heavy on young teachers I think because you see your people running around you just doing the 8-5, and 5:00 they're out the door. And that's not really the nature of teaching ag. And so again that can weigh heavy on young folks. It can cause a lot of burnout I think. But providing that support system to each other is what has really helped me out, at least."

Brief described herself in the least detail. She said she was a very kinesthetic kind of learner and teacher. She needed lots of visuals. She said the one good thing about being kinesthetic is that it has helped her to relate to her own students and their need for that kind of learning. "I guess I was one of your smart kids. I was in like AP classes. I was also in ag classes." She said she felt other students viewed her as "one of those smart kids." She also said that she took most of her advanced placement classes in science rather than math or English. She said she enjoyed the exploratory classes more. The most important thing I noted about this participant was she was very direct and to the point. She didn't take a lot of time to elaborate. Things for her were very black and

white. Her reflections on her experiences were very similar to how she described herself. They were short and to the point.

Brief described herself as resourceful and able to find answers if she needed them, and that she does not use the lesson planning techniques she used while she was in the preservice program. She prefers to sit down with a calendar and plan it out.

Classroom Style

Studious shared that her agricultural science programs offers Occupational Safety and Health Administration certification for students, and that she feels it is important for students with disabilities to be included in agricultural science classes. "I think that as far as students with disabilities being in an ag classroom, I think they have an advantage because I think we can teach them, just like we can teach everybody else the basics and the foundation to help them later on, just the little things that can go such a long way later on. I was actually talking to my teaching partner, and he was talking about going to the hardware store and I think it was an older man didn't know how to put PVC pipe together. Just a very, you know, what we kind of overlook as being, well, it's simple…we can actually address that to kids and show them, okay, these are the different ways on how to do these techniques and these tasks and these things that I think can help them as far as obtaining different jobs."

When asked if she had any advice to give a first year teacher who would be working with students who had disabilities, Studious said, "To be aware. Because actually whenever I was student teaching I noticed that there was a student who was,

they were kind of doing like a little thing, they were building like a bird feeder or something, or a bird house…and I noticed that the kid was extremely frustrated, just beside himself, just didn't want to work on it. And it was because he couldn't cut his line straight, and so I actually like mentioned something to the teacher, because I had been [there] awhile and I came back and they had been working on this project." Studious explained that she brought this to the attention of this student's aid, and no one had noticed his struggle with the project.

"So I think just being aware and noticing each of the kids and how they're responding to different things in the classroom, and whether or not they're getting the material and they're understanding it and they're comprehending."

When asked how she set up her classroom, she said that she had nine tables that she set up in three rows. She had a smartboard that was not set up. She said how she arranged her room was based on trial and error.

Ms. Confident was entering her third year of teaching and was currently teaching at a 3A school. Prior to her current teaching assignment, she had been with a different district where she said she had had as many as seven preparations during an eight period day. "I had a conference, but I taught seven different classes. My second year at [name omitted] I had six." She said at her new school, she would have fewer preparations. "Here I'm gonna have one, two, three, four…four here, and so I'm kind of excited about that because I'm gonna get a little bit of relief as far as how many preps I have. It's tough having six. And being that model teacher that is student-centered and does all the right stuff all day long, it's hard when you have six preps."

She continued, “It takes a lot of time and that’s one thing no one ever told me. I mean, ag teaching really has been my life. It has not been just my job. And I’ve kind of had to watch that…with how much we do. Here I’m just looking at my calendar and I’m like, oh, my gosh! I’m gonna die. I just want to cry right now, you know, because there’s no days for anything, but that’s part of it. But no one really shared that with me.”

“I was ready to quit, and honestly, I don’t think that they can prepare you for the time that you spend. But here’s the other thing, depending on what kind of teacher you are depends on how much time you’re going to spend on stuff. I mean, it’s just like my teaching partner, you know, he’s not at school today working, but I’ve got things I have to do. And so I think a lot of that amount of work is because I do it myself. But I do that because I care about the kids, and if I don’t spend that quality of time, then my quality of teaching won’t be what it should be. So that’s just my take on that.”

When asked how she arranged her classroom, Ms. Confident said, “Well, depends on the day, really…a lot of my kids will probably end up being at the computers a lot of the days. Just sitting at the desk, that’s boring…So I mean, if they want to stretch out on the floor to do stuff, I mean, if we’re working on lots of projects.”

Structured teaches at a 3A school in a suburban area. He stated that his classes have about 10 to 20% of special education students. “Let’s see severe MR in a wheelchair, Downs Syndrome, Asperger students…those are the main ones.”

He said he felt that being in agricultural science classes was important for students with disabilities. “I honestly think that the FFA and the SAE part, those are the two most important components because if they’re in that, they have to be in class, they

have to get the education part. And so you want all your students to be FFA members involved in the student leadership organization in some way. Even if it's just at the meetings [and] they round everybody up to cook a hot dog or something, and then the SAE portion, that's really how they actually learn."

"The SAE portion when they have to actually get out there and do it and you go to their house and visit them or the barn or wherever it is. I think they get a lot more out of that…because you're going to have those kids in your classes anyway, how can you get them involved in the FFA, the actual organization?"

In terms of classroom organization, Structured said that his new classroom for the upcoming school year was smaller than the one he had had previously, and because he liked to walk around the perimeter of the room and up the middle, he arranged his tables accordingly.

"And my personal style, I am one that doesn't really sit down. And I'm always like making laps and moving around, and at least in the first weeks, months, whatnot, you know? I'm very mobile. And so I wanted to be able to make a full circle and then go up the middle.

"I like having them [students] be independent, and then they could always move the desks, you know? If we got together in a big group, boy, they love that, they love moving stuff around. So you know, I say, okay break-up in your groups and do this, and you can move desks however you need to to [do] work. They'd be moving all over the place…you can watch them interact and learn their relationships who works with who good and that's you know, observing the students."

"I mean, personally, I have more fun, me, I have more fun if I get to stand up and talk the whole period. I love it, oh, man, I mean, I'm sure you've figured that out. I have very strong jaw muscles. So I could stand here and talk the whole period and just blast them the whole time, but they can't handle it…so, I've had to amend my style to only give them a little dose, maybe 10 to 15 minutes. It worked for me last year. The first year I didn't have any kind of style. I was just floundering. I didn't have any curriculum so I was just making it up as I go, and it was, like I said, there was a lot of problems there, but second year I developed kind of a style. I have my warm-up. I give them an amount of time. We go over it, and then we move into whatever we're doing. I'll probably give them 10 to 15 minutes of talk or whatever and then we'll try to get to some kind of activity, I mean, they're a lot like me. They cannot sit still for 50 minutes. They have to move around. They're so energetic."

Structured said that he has found ways to include activities that involve all students and that don't blow the budget. He likes to work on relationships with his students, but he has found that it is important to use different approaches for different students.

"That's the problem too, is that technology is only as good as the teacher that's implementing it in the class. If the teacher doesn't know how to use it, or how to make it work for their classroom style, it's worthless," he said. He also shared that he did not have a smartboard in his room.

"I don't have room to put five objectives on the board for each class. Like I put one objective on the board and so in terms of writing lesson plans the way that we've

been doing is [well] it's kind of hard…but once you get past like that first lesson or whatever, you need a practical way to write a quick lesson plan. Like, here is my objective and okay this is what I'm going to do today, like maybe a power point or whatever, and like okay, here's an application."

Brief was critical of herself when it came to closing lessons. "I'm really bad about closing lessons, and I don't ever do a little quiz, or I try to do like, okay, let's read. Sometimes my closings aren't very good."

In terms of her lessons, Brief said that sometimes she finds that her lessons are more teacher-centered. "Like sometimes I have to have them teacher-centered even though I don't like that just to get through some information. You know, like sit up and I lecture and they write notes, and I know they hate it and I hate it…but sometimes I gotta do it. But then you know the next thing we might do because sometimes it will take two days, and then we might do a little more hands on and I'll walk around and things like that. But I try to have them more student-based."

Brief shared with me that she had a Smartboard and a projector. She also had an iPad, but she was still trying to figure out how to use it more effectively. She also said she had an Elmo but she didn't have room to put it up. "I've been to a couple of professional developments this summer. They talk about iPads and phones and stuff like that in the classroom, and I'm not sure we're quite there yet at my school. But I really want to do that which I think would be really cool."

Brief said she felt like her classroom management was "not so hot." She did elaborate, "It's gotten better, but I think we have a better set of kids this year. My first

year I had some crazy girls…it's true about what they say. Like you gotta keep 'em busy."

At the time of the interview, Brief had not been allowed to get back into her classroom so there was no discussion on it's set up with her. She also informed me that she was not on an extended contract. She said her first year of teaching she used group tables, but it did not work out very well because her Smartboard was located across the room. It still worked, she shared, but was not ideal. The past year she said she moved her tables to all face the Smartboard, but she still was not sure if she liked it.

"It's hard to kind of go around. I moved around easier when they were like in groups. So we'll see how I'm feeling this year [when] I have to go put my room back together," she said.

FFA Responsibilities

Studious also shared that she teachers at a 3A high school and that she has a teaching partner. She currently had five preparations for the upcoming school year, which included Introduction to Agriculture, three floral design classes, one horticulture class, and then a livestock/equine class. She also said that she trained teams that included everything except senior chapter conducting, skills, and radio. "I don't train those, but everything else, I'll train," she said.

"And then in the spring I have horse judging, horticulture, entomology. I can't think of the others. I completely lose my mind sometimes," she said.

With all of this going on, Studious said of her time management, " I try to manage my time as best I can from what I can control, but I've come to learn that I can't control much of anything. And so I've learned to be extremely flexible in my schedule, especially during the week." She also told me that if she had children she would have to do things differently.

Ms. Confident also said, "I train ag issues. I train public relations, job interview, both quizzes, both creeds. That might be all." Ms. Confident also said she held practices every morning. "I'm probably here between 6:30 and 7:00 every morning during LDE season. Last year I had six teams at state, so LDEs are very, very important to me."

In addition to her LDEs, Ms. Confident will also be training poultry, livestock, floracutlure, nursery/landscape, and dairy. "From my past experience in high school and then just talking to people…I don't feel like I'm gonna have a problem with those teams because I have enough background to pick up and train those teams even though I haven't trained them my first two years teaching. Now I can't promise that I'm going to state. I've got two state teams that are coming back, so they're probably going to teach me a lot. So, I feel like we'll go back to state but I don't know if it will because of me. I'll be the one that's motivating, helping, encouraging, and a resource."

Ms. Confident also said that she helps students with record books, scholarships, and other applications. She said she wanted to learn more about the proficiency award process.

Structured said he enjoyed livestock SAEs and training livestock teams as well as some LDEs and other CDEs that he did not specifically mention. Most of what he described to me of his FFA activities centered around livestock SAEs.

Brief did not share much about her FFA experiences. Most of her interview centered around her classroom experiences. She did say that during her preservice experience she learned a lot about record books and completing a Program of Activities. She did not share any teams that she trained or specific SAEs that she supervised, although she did allude to it in her statements.

Conclusion

All four of my participants were very unique individuals, and although they share similar characteristics that made them ideal for this study, they all had different ways that they preferred to learn and teach. Their varying length in responses and information shared was interesting to note; however, as the interviews went on similarities began to emerge in their answers. It is the information about their preservice program that will show that although they are all individuals, their answers began to echo each other in Chapter V.

CHAPTER V

DISCUSSION OF INTERVIEW QUESTIONS

Interpretative phenomenological analysis is a qualitative research approach that is committed to the examination of how people make sense of their "major life experiences," (Smith, Flowers & Larkin, 2009, 1.) For a prospective teacher there can be no greater or "major" experience than those preservice experiences they must undertake to reach their goal of certification, employment, and career growth. However, the quality and opportunities presented to each individual can be perceived in dramatically different ways. Based on one's own life experiences, career goals, and commitment to the journey, those major life experiences can look very different even though the path taken might be very similar.

In other words, the education to enter the field of education can look differently, not only from university to university or program to program but also even from student to student. It is through the lens of the observer that the perception and experiences become unique. I was curious to see exactly how I could find one theme to emerge, but, very much to my surprise, as I began to examine the preservice program at the land grant insitution through my interviews, I was struck by how unique each individual was, yet how very similar their thoughts and feelings were about the program itself.

It was very important that as a researcher, I engaged with my participants in a real conversation that allowed them to open up and reflect on their time at the land grant

institution, and then using hermeneutics, look at interpreting those experiences to discover emergent themes.

However, in this results section, not only will an exploration of the interviews be discussed at length. This is so that any other relevant information from the interviews can be presented and discussed as it helps to provide insight into the individuals who took the time to meet with me and share their experiences. Hopefully in the end, some sense can be made of it all in such a way that meaningful and appropriate conclusions can be drawn for the betterment of the program.

Once each of the participants answered the opening question inviting them to talk about themselves as people and teachers, it was time to allow the natural flow of the interview to occur. The participants had their own way of answering, and their own way of looking at things. The following results are presented in order of the semi-structured interview, along with further discussions from each participant.

Questions

Question: How Many and What Types of Disabilities Do You Deal with on a Daily Basis in Your Teaching Assignment?

Studious

As far as students with disabilities, Studious indicated she had one to two in each class. “And what I do is usually I try to either sit them as close together as possible depending on the different levels and stuff. And I try to do a lot of group work with different roles and everything so that they everybody kind of gets this equal opportunity

and everybody's able to work together and there's not these specific guidelines that not everybody can probably follow as well as maybe like a group project or something like that."

"There have been different things as far as lower reading levels and actually my first year I was teaching an eighth grade class and I actually didn't get my red binder of everything until, oh, it was October. And that was around the first six weeks or so. And I had absolutely no idea. And I was never told. And so it wasn't until these grades were actually reflecting basically what these students shouldn't have, you know, that the principal came to me and said, you know, you have to adjust this, and you have to figure out a way to accommodate these kids. And I said, oh, well, thanks for letting me know, that's good know now, thank you. And so from there I think I was a lot more aware, much more aware, actually. Well, it was such a disadvantage to these kids, too, because I had to again adjust certain ways and different strategies in order for them to still get the same concept, but I was being so unfair to them I feel like in the beginning that it was just, I mean, I just felt really bad like later on for I guess the disadvantage that I gave them."

"I mean it really is because kids with disabilities they can't help themselves and they always feel like the bar is way too high for them anyways. And so when they come in and that bar is so high and they feel like they're never going to get it, they just quit trying. I think that first year some of those kids that were in that eighth grade class that I wasn't able to I guess prepare certain things for them correctly, they came into my class the next year as freshman and because I was able to adjust to them and everything, I

think they felt much more comfortable and so they were much more personable and excited to be in there, and I do try more hands on activities as opposed to the written tests or written notes or things like that."

When I asked Studious to explain more about the strategies she used for her special education students and where she learned those strategies, this is what she had to say. "Certain things I do, I mean, I'll do just like simple things. Like if we're taking notes, I'll try to run off copies with maybe like if I have a PowerPoint with like blanks in the PowerPoint so they can just fill in the blanks as opposed to writing everything that we have. That doesn't always happen. Sometimes I might have to just print off the notes. Or I try to do more verbal checking with them. I've tried to modify some of the tests before, I've actually noticed that some of the kids check their neighbor's tests and then they'll wonder why their tests are different, and so I try to modify most of them in some form or fashion, not-because like I said, if they see they have something different then I think they get a little, I don't know, they question that. And it's one of those, well, why is mine different than theirs? Like, what's up with that?"

"I mean, I think it'll depend on whether or not I see a student struggling or having a hard time understanding and I feel like if one or two are having a hard time understanding then most of them probably are so we'll either go over the concept again or in a different way or something along those lines. But for the most part if I know a few of them aren't getting it then I know the next few classes probably aren't going to get it either, and so I try to adjust to that if I see it."

Ms. Confident

When asked about students with disabilities, Ms. Confident said that her first years of teaching were at a very small school, and she only had one student who had a disability. She explained in detail how she worked to include that student in her lessons.

"And then when you have students, like the one student I had in [school name omitted] that was autistic who was very low level that's going to learn how to sweep or count money when he is put in that classroom with the kids that are mostly who are valedictorian it's hard to know how to teach them at the same time because he cannot comprehend what they do. I mean, he can barely write his name. And that was always a struggle for me and I was very frustrated with the school district because they didn't bring anybody into my classroom with him. He didn't need anybody just to sit there in my classroom, but he needed somebody to learn something. He needed somebody inclusively for him because he was in my ag business class, and if I was teaching the kids about commodities, while they were doing something I would sit down with him on his laptop and I would just teach him, you know, what do you want to eat for supper tonight? And let's look at foods. And he'd say he wanted pizza. 'Pizza,' he'd say that all the time. Then I'd be like, is pizza good for you? And he would say, no. You know, it was hard, I was probably stretching it a whole lot. But we had to teach him something, and I felt like I was obligated to teach him something, that's my job, that's what I'm here for. But it was not as closely related to what he needed to be learning. But because there was no one with him, I mean I couldn't, I felt like my hands were tied behind my back and it was a disservice to him."

"Well, another thing I did, too, is the kids were really good with him. I mean, all the girls at school they were great with him. And I used those kids to do what I was having to do some days, you know? I'd partner him with another student in the class and, no, he probably wasn't learning the same things, but he was learning how to interact with that student. In my class the students learn how to interact with him, which is really skills that they'll need outside of class."

"And I think, too, when that happens, when they're working together like that, it really exposes those students that don't have disabilities to those that do, and I think that's important for the future of our world and what we're doing because they have to be accepting of those kids with disabilities."

Ms. Confident said that as far as strategies go, she likes to utilize many different things, "I like to do a lot of interactive things. For example, just like ag teachers conference this week we talked about…ticket out. You have to give kids a ticket on the way out the door, and then write on the ticket an answer. Another thing I did in [name omitted], I like using smart boards. We were technology based. Every student had a laptop there, and so, I used a smart board and did everything interactive, or tried to. Being here I'm kinda like what am I going to do because I don't have a smart board and technology's really kind of behind here because of financial reasons. So technology is big for me. The kids, they like technology. They want to use their phones. And so if I can come up with things for them to do with their phones then that's great, that's what they want. I like to do things on Facebook with the kids. You have a Facebook page for your class and you do your discussions. And you sit there and you type discussions.

Other teaching strategies, I have a teaching strategies book that I like to use that [name omitted] had given me. And I'm trying to think of some of the ones. Like [painting] and the kids can paint. Of course that goes back into the different types of learners."

"I collect post-it notes, and at the beginning of class I ask them all a question, a lot of times it's about the kid, you know, like for example when I did careers in [school name omitted], I wanted to know their three top jobs. I take that sticky note and they write their three top jobs. I pick it up. Before I even start teaching I know what they want to do when they grow up. Now, granted, some of these things are probably not realistic, but it's still a goal and a dream. So I like that. I use PowerPoint sometimes. I feel like that strategy of teaching, that method is kind of going out. It used to be the going thing when I was in high school. But PowerPoint's pretty boring. I like to do group work. For some reason I didn't like it as a student, but I like to use it in my class. A group of three or four, and the kids hate it, too, and I'm like, I know what you mean but we're doing it anyways. I partner kids up a lot to do little things. A lot of my activities take up the majority of class time. And so that's more inquiry-based learning. The activities, the kids love it, but I can't do that unless I've got kids that learn the information first. I did a soil horizons activity and they have to create the horizons. But if they don't know the horizons we can't do the activity. So there's lot of times where we have to build to teach and learn vocabulary and that's boring. It's worse than the writing, but they can't do those activities without that."

At her new school, which is larger, she indicated that she would have more students with disabilities in her classes, but she was not sure the about the scope and magnitude of those disabilities. She was awaiting notification from her school counselor.

Structured

Structured indicated that he had many types of special education students in his classes. He began to tie this question in to his experiences in dealing with them and his opinions on the ARD process.

He said he has learned most of what he knows about teaching special education students on the job. "I was I guess mentally prepared to handle those students but I didn't really, like I said 'cause I didn't have a whole lot of interaction with them. I didn't know what would work and what wouldn't work. And you know a lot of things will work for all students. But it's one of those things that as I—I feel like I wasn't prepared enough. And to me now days the way I see schools going you know, I mean, there are two huge revenue generating areas in schools and that's special ed and CTE. And they're the ones that get the most federal dollars, that get the most state dollars. And special ed is a big thing. I mean, we, you know, have our—I mean I was looking with our CTE director, our [state] scores from this past year and the way they code those kids, you know, we have CTE, we have the ESL CTE kid, we have the LD, you know, all these different labels and stuff for them and so that affects us you know funding wise and everything else. And so it's one of those things that again I probably wasn't prepared enough when I got out of college to do it. But as I started working with them

more I got a little more experience, even student teaching, you know I had some students that were learning disabled and they were great. Those are the ones who were the best workers in the class. But that was only one little small like subset population, you know what I mean? One little sample. And so it didn't really prepare me enough probably for the wide range of things you're gonna see."

"And I sat in on a bunch of ARDs, I mean, I actually enjoyed sitting in on the ARDs because that is, you know, to me it's very weird how we have six or seven adults all sitting at a table with a kid and we talk about them like they're not even in the room. And it's very odd for me, they say, oh, well, this kid is this, this, and this and the kid's sitting there, you know, and it's very odd to me that we have that. It's like that I can elaborate on that pretty long, you know, I mean the whole ARD system, but what makes it and that made me have a question well what makes the kids special ed? You know, who diagnoses that? Is it a doctor? No. It's someone that works for the school that is certified special ed that sees something, maybe a pattern, and then they diagnose. And we have students that were in life skills that did not need to be in there. Just silent girls, never said a word, you know? They're real smart, but they just never would say anything. Their brother might have been a kook, you know, and so they put him in life skills and they put her in there, too. And I see that, at least I saw that in the last two years that there were some kids that were misdiagnosed or just fell through the cracks as we say. And so that makes me wonder, you know, are there motives out there, I mean, are we just coding kids, and grouping them so that we can receive additional funding? I

mean, how does that work? There's a lot going on in there. But like I said, I'm not special ed expert. You know, I just stick to the ag deal."

"And then they just put him in a group and we just continue to bump him on down the road. And then they're in 7th or 8th grade and you realize they're totally fine. They just needed a little encouragement or needed a parent at home to check on them, you know? And again, I'm no expert. I can't diagnose anything like that. I don't have the knowledge to do that or the experience. But to me I think that is happening. And you know you just try to learn the kids, and that's what I do, just try to learn the kids and serve them the best I can you know? Kids that are labeled ED, you know, they put them in my class and I can get along great with them. It just depends on the student. Some of them not so much. They may hate all the other teachers and like me, or they may hate me and love some of the others. And so that's where the whole team asset comes in you know, we just try to serve all that will let us serve them. And hopefully somebody will be able to reach out to them, you know, one or two. But it just depends, you know, like I said, it depends on a lot on the kid's situation. What's going on at home makes a big difference. And at school, too, you know, I mean, sometimes, I mean, me in my first year, you know, I definitely wasn't an angel. I mean, when you have a little kid come up and start cussing you out, you know it kind of puts you on the defense a little bit."

Structured went on to add, "And so you know that's one of those things that I had to kind of learn to deal with and get that stoic nature to where you're, you know, you can let it bounce off your back and whatnot."

He also added, "And they're just kind of lost [the administrators]. A lot of them are just kind of like, you know, you take care of it and as long as you're doing good and I'm not getting complaints, that's fine. But I mean, I've experienced you know dealt with administrators and you invite them to everything and they still don't [come]. They're just not interested in ag, you know? Their thing is maybe going to football games or going to basketball games or something. And they're just kind of like, 'alright, you ag folks, y'all go do whatever. I'll help you out but…' That was the toughest thing I think, just dealing with that, and then the whole aspect of the laws that we have to follow within the school which relates back to what you're talking about with special ed. As an ag teacher, you're probably going to get every single life skill, special ed student, whatever you want to call it, put into your class. And they put them all in my class my first year of teaching."

He did see the value of having students with disabilities in agricultural science classes because they can provide disabled students with valuable career skills. "Exactly, some type of skill. And you know, I mean, repetition of facts and actions is one of the basic factors of learning, right? So that's the great thing about, you know, you have a learning disabled student, you may have them do the same job over and over and over and over. But they get so good at it that like you say, once they acquire a few skills then they may go to work. The greatest example you know, at Bluebell, they had some learning disabled folks and their job was they sat around and they'd break down all the boxes and they stack them up and bundle them up, and they do that all day long. And they just love it. Like they want to come to work every day even on Christmas and

work. And so that's what I've realized when I have, depending on the severity obviously of the disability, if I have learning disabled students I just try to give them something repetitive, something that's a job that they can continually do, and then give them some positive feedback if they've done good. You know, hey, if your job is to sit here and do this continuous thing over and over and over, you know, good deal, you did good. Okay, now you're ready to switch to do something else, let's move you to try something different, you know? And that was stuff that I gleaned while I was student teaching. An example, we were building concrete water troughs and so we had the big cement mixer and one of the kids his job was to scoop three buckets of gravel in there. And then two other kids did sand and then cement. And so it's the same continuous thing, but somebody has to do it. And so by having them doing that same continuous thing, and then they see those troughs when they're finished and they realized, oh, I helped build that. It gives them a little pride, it gives them something, you know, I mean, they're just so—I guess there's not enough opportunities for kids to really just contribute, where they can look at something physical and say, I built that, or I did that, that's the satisfaction that we want them to get, you know?"

"You get to produce. You're actually contributing. And that's what I tell the kids, you know, what can you actually produce? What are your skills? Tell me what your skills are. I know what you're taking, okay, I know what your academic pedigree says, I know what your resume says, but what can you actually produce? What are your actual skills, you know? Real-world skills. And that's the important stuff, I think."

Brief

Brief was clear that she not only had special education students on her roster, but that she was greatly overwhelmed by them.

"Like my first year I had 15 students. Fifteen students in my first [class] and they did range from like I've had two students who didn't talk. And I could ask them, hey, [student's name omitted], like, do you want to color, or whatever and I would help them do that. But because I had 15 students in there ranging from like kids who you know, they could [talk] and they didn't really have trouble like those two students who like really, like I had an aid but still like I felt like I'm not being able to give these kids enough time and so they might maybe not be get to do the activity or able to do the activity. You know what I mean? So it was very like hard with that. Then this year I have like five students in there and two of them were like gone for two days a week to like work placement type things. So it was a little bit easier. But still I was like, it was just frustrating, I guess trying to figure out like what activities they could do and things like that. I don't know, like I just don't feel—I just didn't feel very prepared."

Question: How Familiar were You with IEPs, Modifications, Accommodations, and Differentiated Instruction after You Finished Your Preservice Program?

Studious

Studious recalled hearing about IEPs in her preservice coursework but while about to enter her fourth year felt more comfortable with them. "I feel more comfortable

than obviously when I first started, and like I said, I don't think it really, truly sank in with me until I really started student teaching. And there was one particular student and I didn't really understand how I should modify certain things or work with her specifically. So that was when I went to my advising teacher and I said, 'look, what do I do? Like how am I supposed to do this?' and so now I'd like view like different modifications and things I guess in a different way and I think I teach in a different way so that it's easier for everyone including myself as far as like prep and getting material across to everyone."

Studious said she felt that she learned more about modifications while on the job. When asked how her preservice classes could have helped her more with that, she replied, "I don't know. I can't think of any specific way they could have prepared me better. Honestly, I think it just has to be one of those things where until you face it, you know?"

When asked if the land grant institution had prepared her for modifications and accommodations, she said, "No. Again, I don't feel like it was until I was-until I truly went to student teaching and I was actually in the classroom working under those teachers that they actually taught me and explained to me in more detail, and I think just because they're dealing with it every day and they know how to address it and when to address it and things like that."

Just hearing about special education issues in class was not adequate to Studious in terms of preparing her for the rigors of teaching students with special needs. "I mean, they can tell you all day long, you know, this is how you're supposed to do it, this is why

you're supposed to do it because until you're really in the classroom and it's your responsibility, it's just different, and especially doing it to the extent of what they need yet still challenging them. Not allowing them to just, I think a lot of times people or different teachers make it too easy. I try really hard not to, but sometimes there are days when it's just for survival you almost have to make it as simple as possible…it's not meaningful to you until you're actually in the position, I don't think."

Ms. Confident

When asking Ms. Confident about her coursework at the land grant institution and whether or not it covered special education terminology, she indicated that the terms IEPs, modification and accommodations, and differentiated instruction were only mentioned.

I asked her, "Those were all just simply mentioned?" To which she responded, "Uh-huh."

When asked if she had a better understanding of those concepts now, she replied, "I am now. But when I started out it was a learning curve for me. Because IEPs and modifications that was mentioned in my educational psychology or educational something, I can't remember. Educational psychology I think was the name of it. It was mentioned there but it wasn't like the professor spent a lot of time discussing IEPs with us. And that class wasn't even in the department. That was just a blanket class we had to take."

"I do remember when I was on the block, which is what…pre-service I guess. It would be. We had a guy come and talked about special education a little bit, but it was like a one hour, two-hour workshop thing. And it wasn't enough time spent on that for me to understand what I was doing in special education. I didn't learn all about IEPs and 504, and the IDEA act and all that really until I got into it. Then I was on an RTI committee in [school name omitted], and I didn't learn all that, it just wasn't—and I think it's sad, it really is, but maybe there's just not enough time."

When asked if she felt teachers she worked with from other disciplines on the RTI committee were more prepared than her as an agricultural science preservice teacher, Ms. Confident said, "They weren't more prepared I don't think. I mean, I felt like I knew more about this stuff than the other teachers did. And I don't know if that's from my masters in counseling or what. But they didn't know any more than I did, I don't think. And the special education teacher, yes, she did. But just other teachers like the math teacher or English teacher, no, they didn't. So I didn't find that [the land grant institution] did me a disservice. I just, I mean, I just felt like maybe we should have more about special ed. But I'm not blaming [the land grant institution] for doing me a disservice. But I don't know how well [the land grant institution] could cover that unless there was a class just about special education rules and laws, because it's very specific on—but there's a lot that, you know, special ed's not the only thing that you don't learn until you're in a job, and I think that's probably with any job."

Ms. Confident also reflected on her preservice program and said that as far as tools and strategies she uses to teach students with disabilities, "I mean, I don't think it

was like, here's the skills you need to work with students with disabilities. But I think throughout the program we did things that gave me those skills. I mean [the land grant institution] gave me the skill that I'm able to figure things out. And I think that's why I've been able to figure out how special education works and I've learned all the, not all, but I've learned what I need to know from IEPs and [ARDs] and through the RTI to help me work with these students. So I feel like I was given skills but it was never, here's some skills for—does that make sense?"

"And just like in that workshop they had given me, whoever the guys was, I don't even remember his name now, I would have to go back and look in my notebook. But I have his contact information if I ever need to call him about anything special ed I could, but I haven't used that information. So, I mean, they haven't like left me out to dry on special ed. But they've given me enough that I'm able to function in education. I feel like you have to have a foundation in just education before you can do anything special education. So if you understand the education system and how that works I feel like it's much easier."

Structured

Structured had mentioned that he had taken a special needs class during his preservice coursework. "I did, but it was at [local junior college name omitted]. So yeah, I mean, I don't remember the number and it was—it was a good class, too, I mean, we really got in there and got exposed to a lot of different ones. But unless you interact with those students on a daily basis, you don't, I mean, reading a book is not going to

help. And you have to interact with them. I mean, we have students now that I see that I mean I wish somebody would have told me that they were Asperger's ahead of time. No one—I kind was like, why is that kid acting weird? Well, that explains it. And so I mean they'll bend over backwards for you, you tell them to go out there and get something done, they'll do it. But they may just be constantly on you or asking questions and you're kinda like, why do you ask that, you know, why would they say that? And so that's one of those things that I guess I've learned now by interacting with them to recognize certain signs that make me think, okay, well, maybe that student has Asperger's. Or maybe they are this, that, or the other. And so—but I'm not a special ed expert."

When asked if he had learned more on the job about special ed, he replied, "Oh, definitely, yeah. That's 100% true. I was I guess mentally prepared to handle those students but I didn't really, like I said 'cause I didn't have a whole lot of interaction with them. I didn't know what would work and what wouldn't work. And you know a lot of things will work for all students. But it's one of those things that as I—I feel like I wasn't prepared enough."

The researcher then asked him if he remembered learning about IEPs during his preservice program, to which he replied, "I knew what it stood for. I knew what the acronym stood for, Individualized Education Plan, isn't that right? Close to it?"

"I had seen I guess a type of one. But just as, you know, every district's different. And it's all about who's the leadership in special ed at the campus that you're at. Because they control the rest of the special ed staff and what gets disseminated,

when the documents get out, who's holding accountable. So I kinda had an idea but you know I was not, like I say, I didn't [know for sure.]"

"Not really to the point where I could go right to it and find exactly what I needed. I mean, I had seen examples of ones briefly. But it was not like, oh, I know exactly what I'm looking for and I know how to reference each kid's IEP and what's going to work best and that was something that, you know, in interest of full disclosure I was not as good about doing, you know, I just was not that good about doing that. And like refereeing each kid's IEP and structuring lessons, tests and all that stuff to where it's really going to I guess fit that IEP. Because sometimes I would see them doing things that, and I was like hold on, you're supposed to do this but you're doing just fine. And so again that makes me kind of question, I mean, I don't want to say question the experts, but just question why they have that IEP. Because like I said, I've been in those ARDs and they would just say, okay, well, do you think you need a calculator? Do you think you need this aid, or do you need this? And they would just ask the kid. And so it's kinda like, well, if I was a kid and they asked me, well, do you think you need extended time for your tests? Do you think you need large print? Do you think you need this, this, and this? I would just say, yeah, yes to all. And then I had him in class and I may not have provided that particular function at that time for some reason or another. And they would knock it out of the park. And so I was kinda thinking, well, you know—I mean I guess that again goes back to your individual school district and what you do there. But I guess how is the system structured to where we're really giving the

kids what they need and not what they want, you know? I mean, who determines what they need or want?"

I asked Structured if he had learned about modifications and accommodations during his preservice program. "I was I guess exposed to it. You know, I knew what it was. And, but they tell you, you know, your special ed people tell you what the kid is supposed to get. And I was usually pretty comfortable with it. You know, I could do it most of the time. But as I got to know the kids more I felt like I knew which ones were fooling the special ed folks. Because like I said, when those people were gone and it was me and them, they could work. They'd get it done. And a lot of the times I feel like they, you know, I mean, I don't know. Again, this is coming from a limited number of years of experience in classrooms. So I don't have 50 years or 25 years or anything teaching. But I felt like some of that was, it was, I don't know. I don't even know how to describe it. It was effective, some of it was effective and needed to be in there. And others I felt like the kids were kind of growing out of it."

"Oh, well, and honestly I was more familiar with modifications and accommodations because of my peers in high school and what I recognized they had. Because as a high school student, I'm sitting down to take a chemistry test and this guy, you know, four or five answer choices on each question and my buddy sits down next to me and he's got two answer choices or three, well, you know, I think to myself, well, that's not fair, why does he get to have [that]? And, you know, oh, it's modified, you know? And I said, okay, well, you know, and just kinda remembered that. And then as I learned more about learning disabilities and whatnot I realized the reasoning for that.

But it was not really hit on, harped on, talked about as much. I mean, like I said, that was my experience with it."

Structured said he had a "little bit" of prior knowledge but then when asked if modifications and accommodations had been touched on during his preservice program, he said, "No, I mean, we didn't really talk about it enough really. Because I mean, the reality is if you teach CTE, or teach ag classes you're going to see some special ed students. In fact you're going to see probably all of them. And a lot of that has to do with the way that schools are funded. The way we can receive funding, you know, we put them in certain classes, we can get different federal dollars, state dollars and whatnot. And so because of that, I mean, you're gonna see a lot of those students whether you want to or not. So that's kind of the deal."

When asked if he had learned anything about differentiated instruction during his preservice program, he replied, "We talked about it briefly. It's one of those things that is harped on big time now days, you know? They say you need to have a different lesson for every kid, basically. And as a teacher you're thinking, on, man, well, I'm just working hard to have a lesson for everybody, you know, how am I gonna totally change what I'm doing. And then you turn around here to help this group of kids and those kids up there are punching each other or throwing things or listing to their iPod or whipping out a cell phone or something. And so add that in. when you're trying to implement it in real life as a young teacher that is not as set in my ways and as good at just being head on a swivel, you know, implementing the discipline is good at a younger age it was tougher to do that I feel like. But as I went on I got a little bit better about doing it. But

I'm still I guess gathering different methods that work for certain students because I feel like there's, you know, I have access and I know and have used probably 10% of the methods that there are in the world. And every time I go to some [professional development] or do something with somebody, you know, they give me a new idea, I'll try to take it and use what's good. I mean, I got a lot of ideas from the AV teacher here. She just had some great ideas about just having some structure that would allow me to differentiate the instruction that I'm delivering, you know? But I feel like it was hard for me to measure how successful I was being. I mean, I can't, you know, I don't really know, I mean, well, I mean, there are ways but I feel like I couldn't personally see the results as good sometimes, you know."

Brief

I asked Brief, "And so looking back at your classes, did any of them teach you anything about special education, or how to teach students with disabilities? "No, none. Like we had to take the [special populations] class, which is like special topics and they basically in that class just kind of went over all of like the disabilities that you could possibly see. And I know that sometimes on the block like we had somebody come in and like of go around and give you little scenarios like what do you think you can do for here? But you know I got into teaching and they like give you this accommodation sheet and it's like you're supposed to know like what the heck's going on. Like the first one wasn't so bad. I mean, I'm a smart person, I'm a teacher so I kind of figured it out. And then we went to like a new system and it's more computerized, but still like they give

you the code and then at the bottom you're like see what it's for but then there's like umpteen other things on that page and you're like, I don't like—I have no idea. You know what I mean?"

"I don't know. And then like, you know, I'm a career tech teacher so you have to have one of your ARD meetings. And you like go in there and you're supposed to like know all of this. I'm like a first year teacher, I'm like, this is kinda scary and overwhelming. You know what I mean? Like I'm going in here and I may or may not know this student but I have to make a recommendation for them, like on what career and tech classes to take and it wasn't fun."

Then Brief was asked more directly if she could recall learning about IEPs, modifications and accommodations, and differentiated instruction, to which she replied, "No. I remember like [name omitted] came in and kind of went over some stuff but still like, okay, here 45 minutes and I think that, I don't know, bring some people in that you know, like a counselor or somebody like a special ed teacher and just kind walk through the process because it's a long process. Like, it's not—luckily like my diagnosticians are really good about like—especially if it's not one of my students like I can come in and they'll go like straight to schedule and I can get my recommendation. Okay, maybe they should this or this. But, you know, they don't tell you like they go over, you know, like they send out things for teachers and they have to fill out things and what they think their accommodations for that student should be in like their class. And then go over like all their testing and stuff and just things like that and you're like, what is going on?"

The researcher then asked, "So in your coursework, in your preservice work that you did here, none of that was touched on?"

"No."

She said, "I think that, you know, I think I learned more like in grad school, like actually having to be on a block and like being with all of them that I like learned a lot more. I mean, I learned some useful things in my classes. But there's just still so much I can get up there and even with everything you have to do as a teacher they don't tell you that in college, you just kind of just figure it out like about paperwork and things like—oh, my gosh."

Asked specifically about modifications and accommodations again, Brief said, "I mean, I knew about it because when I student taught I feel like I had more accommodations when I student taught like for semester than I have gotten in teaching which is surprising. I went to [school name omitted] but I was like, oh, my gosh, and you have to like [do] this. So I think having that experience helped me a little bit. But there's still some times when I'm like, oh, God, let me go back and look at the accommodations sheet just to make sure that I'm doing that."

I asked Brief if any of her coursework prepared her for how to differentiate curriculum. "No, I mean, basically they just talked about what are your objectives and like your intro and like know your activity and your closing. But never really talked about—never really hit on your special ed kids, like it wasn't really hit on."

"We, you know, like I think that like teaching ag we are able to do like how I like to teach or how I like to learn and we do a lot of hands on stuff. And I never make the

kids really take notes verbatim and things like that. I think that's helpful to those other kids. And again like I haven't seen a whole lot, like they were mostly in the [course name omitted] class. So but who knows like this year might be different and because I'm not teaching that class this year. So I'm kind of excited about that. I know that's sad, but I just realized every day was stressful for me when I was trying to teach that class."

"Just because of the first year like, because I felt like I didn't have any training in like how to teach kids with [severe disabilities], you know like having a few kids [like] the two kids that couldn't speak to me, like they could [turn in a] direction. And then I've got other kids in there that are like helping the other kid and—but I know that."

Question: What Was Your Experience with the Preservice Program at the Land Grant Institution like in General?

Studious

"You know I felt like I learned a lot during student teaching. More than any of the classes really have taught me. But I do looking back now I see that there are things that—and very small things that could have helped me so much more. And I know a lot of multi-teacher departments usually come in with somebody else who has already taught, and so they kind of have that support and that former knowledge. Well, I started with [a teacher partner] who had never taught before either, and so we were both kind of sinking at the same time."

"And that was just challenging in itself but truly and honestly the student teaching 100%. I almost wish it could have been a full year, and I know that's almost impossible to have a full year because we're not coaches. We don't have a season. We have a year, and to so to train for that or prepare for that it's almost next to impossible. And I student taught in the spring and so not having that fall prep which I feel like is what the fall is, is a complete prep time for the spring, I could go out there and play the game but I didn't know how to get practice."

"And that was another thing. Somebody said just this past week at teachers' conference that one of the professors was actually going in and he was training I think at [a different Texas state university] to work with kids on POs and how to register for livestock shows, and just like little things that maybe not necessarily are overlooked but potentially area huge, huge deal, but 'you know, oh, well, you just register like no big deal' and I just think some of those little things might be slightly overlooked."

In referring to her preservice program, Studious referred to it as "almost too big picture" meaning that those little details like how to fill out purchase orders and register for livestock shows was not addressed and taught. She indicated that some of those "little specifics are some of the more important things that we do."

"I mean, I can't think of any class necessarily in particular. I do think that the classes where we had to go and observe and then kind of reflect on those, I think that those were truly the best because you were actually in a classroom, you got to see not just your professors that you're seeing everyday but true teachers that maybe you've

never met before or you've never been to that school and so you're kind of seeing like a different group of students each time. Especially if you're going to different schools."

"I guess a lot of ag teachers that I went to see, a lot of the ag teachers in comparison to some of the English or math teachers that I might have gone to see were obviously much more mobile. They were all over the place. They weren't just in the classroom so you were getting that overall experience, okay? So we might learn today in the classroom but tomorrow we're going to go outside and see how that works. And so I think just seeing that hands-on approach to it. And I think we just have such a stronger advantage than the other teachers. We do get to go outside and we do get to experiment and we do get to have that hands-on learning that the other teacher just, they don't have the opportunity to do that, or I don't feel that they do. That's kind of what I saw."

During her student teaching Studious recalled particular lessons that impressed her greatly. "Mine was mostly with floral design, and I guess I hadn't been introduced to floral design yet and so, or had that experience in it, and so whenever I did go and see her basically just pop ideas out of her head and just kind of off the fly just really quick. If something were to fall through and she had to come up with something different pretty quick, I thought that was pretty impressive."

"That was one of the main things that I saw as extremely impressive. Because there had been days when whatever you're planning has completely fallen through, and you have to have a Plan B. And sometimes you have to make up Plan B right away. And I think that has to go along with it, too, if a student's not understanding a concept, okay,

[you've] got to adjust to a different way and a different style or different methods that's better for them."

As far as her experience on the student teaching block, "I do think there were certain things, and like I said I can't remember exactly everything, but certain things on the teaching block that if we could have gone maybe a little bit more in depth on as opposed to having just that quick little time with everything just kind of being thrown at us when we're about to just go out and student teach anyway, that was kind of-that was a little overwhelming. There was so much time crunching on the block that I mean sleep or eating, I mean that was kind of out the window. Just because you were preparing so much in such a short amount of time and then you also had the fact that you're about to go student teach and that in itself, you know, because you wanted to do well and you wanted to obviously make good grades and everything, it was pretty overwhelming. I mean, not that we didn't all survive. We made it through fine. But I do think that the teaching block could have been used, the time could have been used in a different way possibly."

She also said she felt that much of the information on the student teaching block was repetitive. "I do think that some of the information was, it was repetitive and it was for the most part unnecessary. But then again there were times on our block when certain students would ask particular questions, where I was like, well, I guess you weren't listening in class because that's not okay. You know? And so, I mean, I guess as far as being able to reach everyone through all the classes, I see it as necessary. But I do think that some of the material was a little repetitive."

As far as the information during her preservice program being current, Studious said, “I think for the most part it was current. I think some of it maybe was a little vague. I think that again until you’re in the classroom, until you’re really doing it, you can make a lesson plan or you can build a unit, but until you’re actually in there and that’s what you’re doing and you’re having to do five units for five different preps, or things like that, I mean, it’s hard to prepare. Until you’re actually out there experiencing it.”

Ms. Confident

Ms. Confident recalled her classes at the land grant university that helped her. “Dr. [name omitted]’s classes where we talked about lesson plans, and her classes were the ones where we really started teaching. Those are in my mind as being real influential. I was like, ‘now I know why I’m doing this.’ And in one of her classes I had to prepare a lesson, and I went to [a local high school] and I taught the lesson to a group of kids. The kids were so excited, and I don’t know if they’d ever been taught before or if they were just thrilled to get to do something or have somebody different, I don’t know.”

“I prepared a lesson. I taught a modified lesson to my peers at [the land grant university] and then I went to the high school there and taught to these high school kids. First time I’d ever taught a class, which can be very overwhelming…and it was! I was kind of stressed about it, but whenever I did it, and I was like now I know why I’m doing this. I had those same feelings when I did her observations class. It’s kinda real life, I think, you know? Another class that did stand out in my mind, I had a special populations class, and the professor brought in somebody that was deaf. Then she

brought in this guy that was autistic…and they talked about their stories. You know, I do not remember her spending much time on IEPs, and it was talked about. It wasn't in our department, but I just feel like it was mentioned. I don't know, I don't remember that being real big…by her bringing in those people that really kind of opened your mind that problems are real and people really do have disabilities. And it didn't make me think any less of the people, but it made me aware of disabilities at least."

With regards to the portions of her preservice program that required observation hours, Ms. Confident said, "It opened my eyes to how you can do things, but then I also had a lot of experiences where I was like 'I'll never do it like that,' or 'I will never be that kind of a teacher.' And I think that's my personality. But I was just surprised at some of the, or maybe it's the lack of what was being done in the classroom versus what they were doing."

"Well, I mean, I would drive an hour to go observe a teacher and the kids would sit there and do a worksheet the whole time, and I'm like 'no, that's not how you're supposed to do things.' I guess I was expecting it to be more student-centered, and they were going to give the students more, so that the students got more out of being in that class. But I didn't get anything out of sitting there, and I know the students didn't."

"There were some teachers I was very impressed about what they did, and that made me encouraged and made me feel like, okay, that's the kind of teacher I'm going to be. There are some things that those teachers did that I use in my classroom, so I got materials and ideas of ways I can teach students from other teachers. I feel it was more so the negative when I observed than getting the positive from it, and I mean that in my

personality I probably said, 'well, that's why I'm gonna be a teacher because I'm not going to be like that.' I could me saying that, too."

With regards to observing classroom management, Ms. Confident said, "There's more discipline issues I'm sure. Now, with me being in the classroom I think probably the kids were better behaved than when they would have been if I wouldn't have been sitting there, but when you have a classroom like that, the kids are going to misbehave. They just do from my personal experience. I mean, I had teachers that they would visit with me the whole time, you know? And like I guess that was good for me because I got information from those teachers, but that's not good for the students. I felt like there was no structure in those kinds of classes, and I'm structured. I have a plan and by the end of class the plan's gonna be accomplished. I'm going to start out my day by telling them what's on the board as far as what's going in our program…then, I tell them what we're gonna do."

When asked about any other classes from the land grant university that may have helped her, Ms. Confident responded, "Dr. [name omitted]'s class which I had lots of record book experience. When I was in high school I got my lone star [degree] through IMS [record book system]. Well, then I went to [the land grant university] and Dr. [name omitted] taught us the AET, which is the new record book system. So that taught me AET and I was very thankful for that. AET is easy so, and with my past experience with record books I knew what I was doing. Now other kids in my class had never been exposed to record books at all and were blown away. There was only like two or three that had ever been exposed to record books. So that project was really easy for me

because I had experience from high school. So, yeah, I did learn about record books. Applications, I still haven't figured out proficiency awards, and I keep trying to get them to do a workshop at ag teachers conference for that."

Structured

When asked about his preservice experience, Structured replied, "Well, honestly, the classes that helped me the most, because of my situation was a little, I guess, well, it may not be as different now days as it used to be, but I was an animal science major up until the middle of my senior year and then I decided, oh, well, I would like to go teach ag, you know, I'd like to involved with that. Those animal science classes that were hands on, like swine production, the beef cattle, livestock judging class, the horse judging class that I took [were helpful]…it's ag science classes that we took, they were very leadership focused and they were very focused in the context of how to operate in a school setting, but I mean the majority of ag chapters are livestock folks. And like where I work now, you know, yeah, that stuff's great but we are able to I guess hook a lot of students through that livestock carrot, if you will. You know, that's the way we draw them to the program and that's a pretty important thing."

Another class he deemed important was his educational psychology class. "It helped me in terms of looking at it from the psychology perspective of dealing with students. I mean, that's always the thing is everyone talks about how hard the PPR is and all that type of stuff, and you have to kind of think not what you would do in the just plain Jane world, but in the perfect world what would you do? And that can be difficult,

but it allowed me to kind of see both sides of the educational spectrum. I think out of all the classes, you know, the animal science classes, the livestock judging, any of those classes where you really got the hands on interaction with agriculture. Whether it be working with [professor's name omitted] out there in the greenhouse doing the garden science stuff or at the beef center or with Dr. [professor's name omitted] doing the swine, you know, pairing out the sow and having to take care of the little pigs and stuff. I mean, I got more out of that because that's just the type of learner I am."

"To me a lot of the ag classes are very repetitive. There were maybe three or four or five classes that went over the same thing. And I was very blessed to be a part of an FFA chapter in high school where we were very active in leadership events, career development events, and so as in high school I had to learn the FFA manual backwards and forwards because that was part of our contest we were participating in. So some of those ag science classes, those are things we would go over and I would kind of just tune it out because to me it was like I've been over this…I already know it, and so, I need to know the other side."

"After my first year of teaching I had a whole list of things that I felt like, oh, I wish I would have known this before I came into it. Obviously discipline with kids is a big thing. That was something that took some doing, but interacting with administration and parents is even more difficult. I mean, I didn't know what my expectations were dealing with the parents. Because I mean I was fortunate to grow up in an environment where if my parents got a phone call from the teacher, I mean, I was gonna get my butt whipped pretty good, and not every family is like that. I didn't realize that and so I didn't

understand the expectation. And interacting with the administration, you know, like I said earlier the ag teachers were really some of the only ones that know what's going on in our area. Even the administrators don't know what's going on.

Brief

With regard to her preservice experiences while at the land grant institution, Brief said with regards to giving her some good teaching tools, "I think just the experiential learning stuff because I took a class in grad school, so not everybody's going to get that."

Upon further questioning about her coursework at the land grant institution and how it has helped her to teach presently, Brief replied that her ability to teach now comes mainly from her resourcefulness versus any course content. She also said when asked further about what she could recall from her coursework, "I'm trying to think back. That was a long time ago. I think like I was learning about different modalities of teaching. Like you have your visual students. Like that helped. I do remember that. And like knowing that today, these kids are going to learn different and things like that, and I think some of them [classes she remembered] are like hands-on horticulture classes, like floral design. I took a garden kind of class."

Question: What Was Your Experience at the Land Grant Institution in Terms of Learning How to Develop Lessons that Reach All Learners in Your Room?

Studious

In lesson planning, "I've used certain templates for certain classes, but for the most part [the lesson planning learned during preservice training] it wasn't-no. The way I teach, and I know it's probably not the ideal way and it's not the right way. I'll set up my lesson plans and I'll figure out a way that I want to do it, but it's not until I'm in the classroom that I actually know how I should teach that class that day and especially depending on the class. I might have several intro classes, where, well, we're gonna learn it this way in the class but we're going to learn it this way in this other class depending on the students, and so my approach I think alters between classes and the students."

"I think that as far as students with disabilities being in an ag classroom, I think they have an advantage because I think we can teach them, just like we can teach everyone else the basics and the foundation that can help them later on. Just the little things that can go such a long way later on. I was actually talking to my teaching partner and he was talking about he was at the hardware store and I think it was an older man didn't know how to put PVC pipe together. Just a very, you know, what we kind of overlook as being, well it's simple, to something that we can actually address that to kids and show them, okay, these are the different ways on how to do these techniques and these tasks and these things that I think can help them as far as obtaining different jobs."

Ms. Confident

Ms. Confident also indicated that how she develops lessons now is based on her understanding of how students learn. “Well, first you have to look at the big picture. Every student learns differently, and so when I’m developing a lesson I try, I really, really try to develop lessons that have different activities for those visual learners and for the tactile learners, and you have to think about Gardner’s multiple intelligence theory. And when you know that it really helps to create a lesson that’s different in each area. You know, I may spend ten minutes doing something where kids have to stand up and speak but then I may spend ten minutes where they’ve got to write and listen. And it’s hard to do that every day. And then sometimes I feel like I end up teaching to the kids like I learn, and like the kind of student I was, and how I worked well. And that doesn’t always work, you know? But that’s just your tendency to—you play the lessons like you learn. But I really try to keep in mind that I have students that don’t learn that way. And then after I think about the whole picture then that’s when I start going through my introduction, what I’m going to do. And then I try to do activities somewhere in there. Every day I try to switch it up based on the different learners. And then while I’m playing that lesson I’m thinking, okay, Johnny has this modification, or this problem, what am I going to do differently with Johnny for this. Am I going to make notes that have it filled in already for him, or is he going to have a word blank, or when we have a test how is his testing ability, or do I need to give him some extra time on this while the other students work on something else, or whatever. But that’s really hard, too. I mean,

you can do that all day long in your lesson plan, but then when class is here sometimes it's hard to make sure that that happens for Johnny. So that's absolutely true."

" [My lessons are] student centered. It's not about me. I've already learned this stuff and it's not my job to tell the kids what I know. I mean, they'll ask me what I know and I'm happy to share with them things when they ask questions and all that. My job is to teach them, not me tell them what I know. And I used that through that student learning. They learn more when it's student-centered they're having to come up with the answers, I'm not telling them the answers. Now the kids want you to tell them the answers. They want to sit there and they want to be lazy, and they want you to give them the answers. I mean, they're just as fine writing vocabulary all period than having to get in a group and research a project on the internet and come up with a science experiment to prove it. They would rather sit in their desk and do a worksheet. I don't feel like they learn, I just feel like they're going through the motions when they do that."

Lesson planning for achieving all of that takes time, and Ms. Confident described how she goes about creating a lesson. "Originally the activity is going to be the same. And then if there [are] students that need those modifications of accommodations I would incorporate that into the activity for them. Now for that one student his activity may be completely different. But if there is not, and I don't want to say extreme because to me that's a negative word, but if there's an extreme modification in that student's case, I keep the activity the same because if the activity's different they're getting two different lessons I feel like. And the students are like why does so-and-so get to do something completely different. Which doesn't matter, but in a way it does because that

student then feels, oh, I'm getting treated differently and then students pick up on that and that's a problem. So I really try to just modify that same activity."

"And they don't need to feel like they're any different than any other student because they already know they're different. And so when a student points that out, that just makes for lower self-esteem and it just, it's not a good situation I feel like, you know? And so I try to provide same opportunities and if that means I sit with that student and do that activity with the student, that's still modification in my mind, they're getting some extra help one-on-one. So it can be as little as that as to cutting out the three questions at the end of the activity or whatever. But I never really do a completely different activity."

Structured

When asked if his preservice program had prepared him for his first year of teaching, Structured replied, "For the most part. I mean, they did prepare me but they didn't kind of a thing. Well, I think that when you're—I mean, you can probably understand this being a teacher. When you're in the trenches, in the classroom, it's all on you. A lot of things are different than when we're in a college setting or when you're speaking with administrators, you know, if you're not in the classroom sometimes you are just oblivious to what really goes on with the students. I mean, I wasn't prepared enough. But I mean, there were some things that I still lean on that I gathered from the preservice program that continue to help me. And a lot of that was the relationships I made with other students that I had. Because I can lean on them for things that worked

for them, you know, different, you know, pick up the phone and call somebody, that type of thing. That was probably the biggest thing that I gained from that. But there's like a whole 'nother world outside of what goes on in schools. And unless you're involved in the school world, I mean, it changes year to year, like even if you're out a couple of years, a lot of things change. Because mandates come down from [TEA] or this, that, and the other happens and all of sudden something is totally changed. I did have some preparation, but it was not that nitty-gritty real world preparation that I got during that first year. Now there was a lot of angst, a lot of turmoil and anger and what not that we're coming forth from that."

"Well, and apparently it is normal. And that's why all these first year teachers that I meet, you know, I just, I mean, I pray for them and tell them all the time, you know, I'm here to help, man, 'cause it's, I don't know, I mean, my personal belief the teaching thing, it's one of those things we always say that we want to help other teachers. But a lot of teachers really don't. They're pretty much like screw you because if you get better than me that makes me look bad. And you know how it is, and we kind of—some people will help you, they will really help. But others are like, you know, I really don't, it's not really my place, you know, just figure it out. No one helped me so why should anybody help you? And that's a bad attitude to have. And then there are people that believe, well, you need to suffer through it on your own that's the only way that you'll learn. And I understand that, too you know? Suck it up, learn it on your own, right? But I think that's one of the reasons we drive a lot of people away, too, is because you think that that's how every year is going to be. And until you get through a couple

years and realize, hey, it can be a lot of fun, you know? But you just have to know how to handle administration, handle parents, I mean those are the things that will run you off. I mean, the kids, you can deal with kids if you like kids. But dealing with parents I mean, and every community's different, some parents are going to be helicopter parents and right over you. Others aren't going to care at all, that's your problem from 8:00 to 3:30, you deal with it."

Asked if the land grant institution could have done anything to help with those things, he said, "Well, I don't know, I don't have all the answers. But I would have liked to visited with someone who maybe just finished their first year but still not, you know, obviously you gotta screen those folks a little. You don't want someone that's going to scare everybody off. But someone that dealt with the first year troubles and is coming back for round two or three, something like that. And then has some advice on dealing with that type of thing, speaking with teachers that maybe have to deal with ornery administration that doesn't understand them, or something about dealing with parents because honestly we didn't discuss that at all. And so I had some of those life skill students in my classes and like one parent she worked up here at the high school while I was in junior high and she would call all the time about stuff. And she would call these teachers and I would just call her and she was wanting to be very involved, which was the opposite of a lot of the other parents. So something with how to deal with parents, different types of parents. You know, now days and the way with our technology, you know, I mean they want an email every day, they want a call, or they want this, that, and the other. And how to deal with that would I think would have been

good because that's something that I feel like is just, you know, I mean, if you're in a class and a parent comes in there and starts yelling and screaming at you, not only does that undermine your authority with the students but it makes you feel bad. I'm trying to help your kid and you come up here screaming and yelling at me, I mean, can't we have a civil discourse here. So those things, I mean, I remember we listened to the 30 year ag teacher type of folks come in and talk and they gave us a lot of feel good stuff that really makes you motivated. Like, hey, I just want to go out and teach for 30 years. But we didn't really get to interact with any of them that just got through that horrible first year."

"Yeah, that time when you're like okay, here's all the mistakes that I made that you don't need to make. And that was, and I don't know if that's their place to come and say that, but I feel like it would have helped me out a little bit just having, you know, learn from other's mistakes. And again, there's a school of thought that says you know what, you need to make those mistakes, you need to fall on your face that's the only way you'll ever learn is by suffering. And yeah, I understand that school of thought, but me personally I would—the heartache and the just turmoil that you have to go through it's not something that I really wish on anybody if they've had to deal with it. You know what I mean? I mean, I feel like it's going to be hard enough anyway so why don't you go ahead and give them some ammo to help combat those problems instead of just being totally caught off guard. That's the deal. And probably something on how you could interact or involve your special ed students in the FFA. Okay? Actually involve, you know, we talk a lot about agricultural education, right, but there are three

components, right? And I honestly think that the FFA and the SAE part, those are the two most important components because if they're in that, they have to be in class, they have to get the education part. And so you want all your students to be FFA members involved in the student leadership organization in some way. Even if it's just at the meetings they round everybody up to cook a hot dog or something. And then the SAE portion, that's really how they actually learn. I mean we can sit here and say it fifty thousand times in class, but they don't learn by doing that. They don't learn it by just us being in class. I mean a few might. But the SAE portion when they have to actually get out there and do it and you go to their house and visit them or the barn wherever it is, I think they get a lot more out of that. Or the students we serve now because they're just not, I mean…if it's not interactive, if it's not something that they can develop a relationship with then it's not going to happen. They say that three Rs are now, Rigor, Relationship, and Relevant, right? Those are the new three Rs. And that relationship portion that could be with a teacher, it could be with a friend, it could be with their pig or whatever. And that's a big thing. Those are probably the main things. Because you're going to have those kids in your classes anyway, how can you get them involved in the FFA in the actual organization. I think that would be beneficial."

Then Structured was asked if the land grant institution provided him with any tools regarding dealing with students with disabilities. He responded, "I mean, not so much. The main thing that I can really remember drawing as my experience student teaching, I student taught at a large, very large ag program. I was involved with the ag mechanics and all that type of stuff. So we had students in there that were learning

disabled and had disabilities and what not. And through my interactions with them I learned how to, I guess I learned some things that I could use while I was doing my lessons, especially in a hands-on environment that would help those students. But in terms of something that we learned in class, I mean, nothings really coming back. I feel like we focused a lot on things that almost didn't matter that much. And I hate saying that, it just killed me to say…but things like filling out the lesson plans correctly. You know, I mean to me, hey, they want lesson plans but all they want is, what are you doing this week? What are you doing that week? I mean, it's not so much the—I guess, and I would have liked to have something where you could sit down and say, okay, this is what we have to cover, this is how we're going to break it up. We need to split these weeks in here where we have FFA activates when nothing's going to—you know, we've got a stock show that week and everyone's gone or I'm gone for a stock show, then obviously we're not going to be hitting that. You know, just something like real FFA real world related stuff. I feel like we focused so much on just the agricultural education part that we neglected the FFA and the SAE. And we didn't neglect the FFA portion in terms of like how it's structured, but how you as a teacher need to implement the FFA so that it grows and it's a part of your program. The reason kids get in ag should be because I want to be in FFA. Not do I want to learn about cows, they should want to be a part of that organization. That to me is the—I mean, the organization itself, we need to promote it and get as many kids as possible to join. And then the other things will follow behind. When they're in FFA, oh, well, maybe I should do an SAE. Can't raise an animal? Well, let me do a science fair project or let me do an exploratory SAE, let

me do this, that, and the other. You know what I mean? And so I hate to just run 'em down and say we didn't do anything, but I mean…but I just feel like we focused repetitively on things that now I really don't use as much. It's kinda like, you know, each teacher develops their own style. And maybe we were learning a style that was meant—maybe some people really benefited from. But me personally, I mean, if my goal is to get my program to grow, get more kids involved in the FFA, be successful in all the competitions, events that we participate in, that to me is how the kids really learn because when they leave, what did they learn when they leave at the end of the year? Yeah, we talked about breeds, we talked about food fiber and all these things, but through the interaction is how they really learned. They say, oh, I learned how to—you know, one day we dehorned a calf, or we did this and I actually did the actual stuff. And so that to me is how it really sinks in a lot more because our kids are so, I mean, they're so kinesthetic they have to touch, they have to see it, they have to do it. And they've been raised exposed to blood, guts, gore, things that I didn't get access to till I was already out of high school, probably a lot of it because of the internet. And so it's something that, you know, I feel like the world around us, education itself is changing but our school system hasn't quite caught up yet."

Structured also went on to say, "Yeah, I mean, I think that's what we're supposed to be doing is utilizing—and that's what I think is the most effective way, if we utilize the FFA to teach the TEKS then they're gonna get it. And then they're going to come back wanting more, you know, they're want to come back and compete. And they'll really grasp a lot more. Sometimes we get in that mode of, oh, we'll just stand up here

and show PowerPoints and whatever and take notes. That just is not effective from my perception of observing students that I've had the last couple of years. It just don't work anymore. I mean, they get that in every class. And so you hear them all the time, right? Oh, this is boring, you know, how come this is so boring? It has to be exciting and fun, well, what's more exciting and fun than actually getting out there and getting to interact with something? So many students have no experience at all with agriculture. They've never even touched a cow…you know especially here."

I asked Structure to elaborate more about his preservice program, to which he replied, "It was very plain vanilla. And there's room for that. There should obviously be a class or two where you get exposed to the plain vanilla. But I mean, as ag teachers we're supposed to be the cream of the crop, the sharpest on the campus. We work the hardest. We deliver the instruction and the experiences that these kids get nowhere else. And so if we're just like everyone else, then we're just a talking head up here just saying whatever and just filling in the gaps. That's not going to do it. I mean, it has to be the experience factor. And there's been some studies that shows the Millennial Generation and I don't even know what the, I guess Generation Z is the new generation coming up. But that generation, you know, they're looking for experiences. Because if you need to know a fact, just go to Google. Just go look it up on Google. So I guess the knowing facts and figures is not so much important to them. And it would make sense if you can just go Google something, why would you have to memorize anything? But it's the actual experience of doing it. You can't Google, I mean, well, you can Google how to dehorn a calf, and it may show you a video, but if you've actually done it, if you've

actually physically done it, oh, I know how to do that, I can do it. Or, I've done it before. I know how to strap down a heavy load like a tractor onto a trailer so that it's not going to come flying off. I've actually done these things and so I know how to do them. And so they have confidence because they've done it. And they're willing to go out there and take risks. So many of the students are unwilling to go out and do something because they're afraid of screwing it up and they don't want to be embarrassed. They don't want to look stupid. You know, 'oh, you screwed up, you're stupid,' you know, they don't want that. They're so, what's the word, insecure about what it is they're doing but if they know it, they've had some experience actually doing it, then, oh, okay, I can go hook up a trailer, I can go do this, I can go do that because they're, 'oh, I know exactly what to do, I've done it a million times.' And so they have confidence. And then when they get out there in the job world, what can you actually, I tell them all the time, you know, what are your skills, what can you actually produce? What can you actually contribute? Yeah, you can text, but in terms of your skills that you're actually able to do, what can you do? 'Oh, well, I can weld. I can run a saw. I can cut. I can use a level. I can read a tape measure…I can do these things.' So they're willing to go out there and stand on that as their platform and say, 'this is what I can do.' And those are the kids that will get the jobs."

I asked about the types of strategies that Structured utilized in his classes. "Yeah, I mean, I'll do different like groupings, kids peer tutoring or peer advising, that kind of stuff. A lot of that was just learned on the job or from visiting with other teachers that have worked with those kids in the past is really the best way. And then reward systems

for certain kids, like the ED kids and stuff. And I think I have a couple that are popping in my head at this point. And they, you know, it depends on the teacher, too. I don't think any of that works good for every teacher where you reward them with certain things. But some of them, you know, a bag of chips and a Gatorade go a long way. But again it depends on the kid. And I think it also depends on the teacher, too. Because some of those students will take your reward and they will be eternally grateful. And others will take it and then they'll say, oh, well, I got this from you but I'm still gonna turn the screws to you when you're not looking. And so it depends on your relationship with them. A lot of times those students, you know, now days the big, I guess the big thing going around is the whole bullying issue and stuff. And again that's a whole 'nother study we could discuss for hours and hours. But a lot of those students, you know, the ED and stuff they would perhaps be the ones that would initiate the bullying and obviously a bully, they're looking for a reaction. And a lot of times they're insecure with themselves. And so sometimes I would have to push on them a little bit, but then back off. And then I would make them pay attention and then once I pushed and backed off then I could kind of gain their trust a little bit and then they realize, oh, well, Mr. [name omitted] is not someone that I need to mess with, but he's willing to help me out if I need help. And so it's kind of a mutual respect thing for some of those students. But that was just in my limited experience with the kids. Like I said, I realize don't paint students with learning disabilities with a broad brush because if you do that, boy, it's going to come back and bite you. And that's what I realize, yeah, you may have that disability, but you need to get to know that particular kid because they may act totally

different from a different kid with the same disability. I mean, the personalities are different, their family life's different, who knows how they're going to react to certain things. And so you gotta watch that."

Brief

Asked if there was anything from her preservice program that she learned to help her in her classroom, Brief said, "I think just doing the like experiential learning stuff because I took that class in grad school, so not everybody's going to get that. But just, like I just kinda had to sit down and think, okay, like we're going to have to go back to the basics, like the super duper basics. And I would just get—I would just like a lot of hand drawn stuff."

Brief said that she felt her ability to meet the needs of her special education students was based more on her resourcefulness than her preservice coursework. "Because I'm just having to do it like I just had to go up there and I had to teach these kids. It wasn't so bad with like five and like three of them, we went to the greenhouse a lot. But I still felt like, I was like [name omitted], you have to teach these kids something, you know what I mean? And I still feel like I didn't like live up to that ability of being like a really good teacher because I'm like hearing about all—like I go in those and I'd hear like what all they do in class and I'm like, like I feel like—I felt that I wasn't—I mean I kinda felt that I wasn't giving them enough in class, you know what I mean?"

I asked Brief again if there was anything she could recall from her preservice experience that may have helped her, and she said, "I'm trying to think back, that was a long time ago. I think like I was learning about different modalities of teaching. Like you have your visual students. Like that helped. I do remember that. And like knowing that okay, these kids are going to learn different and things like that. I mean—And I think some of them are like hands on horticulture classes. Like floral design, I took a garden kind of class."

Brief then added, "I mean there were some classes I was like I'm sitting in here and I'm listening to you talk about this, but [I learned] in my OSHA class. And like my welding class, even though I don't teach welding, but he just kind of was like threw us in like we were just like, here, go do it. I was like, okay. And I guess that probably, looking back now that probably did help with that special ed class because it was just like, here, now I have to do it. And then some of my, you know like, if a class had operational feature now where you had to learn about your ag science program and your FFA program."

Brief said, "I think that, you know, I know it's important that you learn how to write a lesson plan. But in actuality you don't write lessons like that. I still don't write them—like I try and set out—I was trying this yesterday. I didn't get to it, though, but I was going to, like sit down with a calendar and just kind of plan out. I still don't do like [that] either. Like I was going to change. I mean, I kind of did, I went all the way into the second semester and I was like, crap, like, that didn't take a week, it only took like two days. I mean, I think that's good in seeing what's helpful because you kind of put

down, but like a full blown lesson plan with five objectives, you know, like I don't have room to put five objectives on the board for each class. Like I put one objective on the board and…"

"So in terms of writing lesson plans the way that we've been doing is it's kind of hard but I think if you're going to do [it], I think it's helpful, okay, I'm going to sit down and I'm going to plan. It helps I think with your planning, but once you get past like that first lesson or whatever, you need a more practical way to write a quick lesson plan. Like here are my objectives and okay this is what I'm going to do today like maybe do a PowerPoint or whatever. And like okay, here's an application. And then maybe a—you know, I don't do—I'm really bad about closing lessons, and I don't ever do like a little quiz. Or I try to do like, okay, let's read…sometimes my closing isn't very good."

Asked what strategies she used in her classes, Brief said, "Modify tests, take out an answer and maybe like shorten their, you know, you only have to list two instead of four or whatever. Things like that. I don't like tests. I'd rather give them a project, something hands on. So I might not make them do as much in a project, things like that. But I give everybody modified notes. I give you a note sheet or I'll be like, hey, this is what we're gonna write down. Or, hey, don't write everything down. I had to deal with an interpreter. That was interesting 'cause I never—and just making sure like to like talk to the interpreter kind of when you're doing the lesson or standing up there, things like that."

"Like sometimes I have to have them teacher-centered even though I don't like that just to get through some information. You know, like I sit up and I lecture and they

write notes. And I know they hate it. And I hate it but sometimes I gotta do it. But then I'd much rather—but then you know the next thing we might do because sometimes it will take two days, and then we might do a little more hands on and I'll walk around and things like that. But I try to have them more student based. But again, you know, sometimes…"

When asked if her preservice program gave her any teaching strategies or techniques, Brief said, "No, I mean, we talked about different ways you could possibly like teach. But maybe like you'd have a lecture or like PowerPoint. You could do like some group learning. But I don't think it was in depth enough that, again, I just have to figure it out. You know like we've had professional development over things like that I think at [name omitted]. And so that helped a little bit. But again it was just like a quick, you know what I mean, like an hour before school."

"If I ever teach another special ed class really I think that I just some need some more like practical things I can use in class but not just like—again I'm not a tell me [person], [I'm a] you gotta show me type of person."

Brief was then asked if her preservice courses had been more hands on versus lecture based, would that have helped. "I think we did do a lot of hands on things. But, I mean, I still think we could have maybe gotten more in-depth in just some other things than, you know we spent I think two weeks or so talking about lesson plans, like…lesson plan again not quite practical and—so real world because there are so many different ways, you know, like you can put on the computer and things like that and they might tell you, oh, you can do whatever you want. Okay."

"Because again I don't think they tell you all what there is when before you go teach. Like it's just a lot of things."

When Brief was asked if there was anything her preservice program could have done better to prepare her she said, "Just how special ed is hard because by law they have to have one in there and you're gonna get pulled in even when [you] go in and sit in [an ARD meeting] maybe for your student or maybe for [another] student and just have them be prepared, hey, this is what's going to happen. Because, you know they told us about it but I don't think that you really—I didn't really feel like, the oh, my God until I had [knowledge that] you can be qualified. What are you talking about agree or disagree, things like that. Most of the time you agree on all of it."

Brief then talked about that it was her student teaching experience that benefitted her. "I learned a lot again because, you know, we had to just go out there and do it, and it was very practical and I learned a lot from my cooperating teacher and just kind of seeing like how she did things in her classroom, management skills, and her policies, and I still—I mean, I do those things in class that I learned, you know, they still work and things like that. Setting up like a [classroom] which I'm going to change again this year because I haven't liked how I've done it in the past years. I'm going to try something else and see if I like this better."

"I would have probably liked it to be longer [the student teaching experience] just for the fact that I was on the block for four weeks and I feel like I could have been there like getting to know kids and I know it's kind of hard because you don't get to see like the first day of school. I student taught in the spring and so that's not technically the

first day of school. Because I thought oh, my gosh. I even had a dream about that this year. So I know that you probably—I don't know how it would be feasible to get to see that, you know, you can't all be a first day of school in the fall because not everybody student teaches in the fall. But, you know, it's just kind of a scary experience. But then once you get it over with it's like okay. The second year wasn't so bad."

CHAPTER VI

THEMES

After reviewing the transcripts and coding the data by using tally marks and interview comparisons, three themes emerged. Each theme is discussed below. Within two of the major themes, sub-themes emerged as well as can be seen in Table 2 below. They are also discussed at length.

Table 2
Themes

Theme	Sub-Themes
Learn by Doing	
Lack of Preparedness	IEPS, Accommodations, and Modifications Having to Learn on the Job
Room for Improvement	Lesson Planning Repeated Information or Lack of Information

Discussion of Themes

Theme Number One: Learn by Doing

I can recall hearing the phrase, "if you can see it, feel it, touch it, smell it, then you can learn from it." The truth is that the subjects all agreed that the experiences that meant the most to them were the one's where they got to do just that. Through observations-based methods classes to student teaching, all the subjects found pros and

cons in the teachers they worked with and observed that helped them develop their own teaching styles.

Studious stated that she learned a lot through the student teaching experience. She said 100% that the student teaching experience was her best learning opportunity during her preservice time at the land grant institution. In fact, she went on to state say, "but I almost wish it could have been a full year…I know we're not coaches, we don't have a season. We have a year. And so to train for that or prepare for that, it's almost impossible." In her experience, she student taught in the spring and so not having that fall prep, which she feels is what fall is…prep time for spring, she wasn't prepared for the rigor of the beginning of school experiences. "I could go out there and play the game, but I didn't know how to go out and get practice."

Studious said that the impact of being a teacher really didn't sink in until she was about to do her student teaching. As she reflected on her moments before student teaching, she fondly recalled how observing her cooperating teacher impacted her. She said that she benefited from watching a real agricultural science teacher put a lesson in motion.

When asked, "So actually see real ag teachers put their lesson plans in motion was what helped you the most?"

She smiled and said, "Yes." From the classroom where they talked about seed germination to actually going out into the greenhouse and watching the kids apply the knowledge they had just learned was very meaningful to her. Another aspect of working with a cooperating teacher, was in the area of floral design. Studious said she felt she

didn't have a lot of experience in dealing with this particular area. "I guess I hadn't been introduced to floral design yet and so whenever I did go and see her basically just pop ideas out of her head and just kind of off the fly just really quick…if something were to fall through and she had to come up with something pretty quick, I thought that was impressive."

To help her elaborate, she was asked, "And so you were impressed with the way that she was able to adjust very quickly?"

"That was one of the main things that I saw as extremely impressive," she continued. "Because there had been days when whatever you're planning has completely fallen through, and you have to do Plan B, and sometimes you have to make up Plan B right away, and I think that has to do with if a student's not understanding a concept, okay, now I have to go a different way and a different style or different method that's better for them."

Studious also said that all the classes where they had to "go and observe and then kind of reflect on those, I think that those were truly the best because you were actually in the classroom. You got to see not just your professors that you're seeing everyday but true teachers that maybe you've never met before or you've never been to that school and so you're kind of seeing like a different group of students each time."

Ms. Confident found the experience of observing to be motivating in what not to do. Watching teachers in action opened her eyes to how things can be done…both good and bad. "I had a lot of experiences where I was like I'll never do it like that, or I'll never be that kind of teacher." She said she was surprised to see the lack of instruction in

the classroom. “I would drive an hour to go observe a teacher and the kids would sit there and do a worksheet the whole time, and I’m like, no! That’s not how you’re supposed to do things.”

Ms. Confident said her disillusion with some of the teachers she observed was based on the fact that she felt the instruction should have been more student-centered. “I didn’t get anything out of sitting there, and I know the students didn’t,” she said, and although, what she was seeing was bad in her opinion, it did motivate her to want to be a good teacher. She said the negative was more meaningful for her to observe than the positive because she said that was the way her personality worked, and with a determined look and a no-nonsense tone, she said that at the time her internal thought was, “That’s why I’m going to be a teacher because I’m not going to be like that.”

As she continued explaining how observing teachers affected her, she wanted to make clear that it wasn’t all bad. Ms. Confident did say that she saw some good teachers who impressed her. “They made me encouraged and made me feel like, okay, that’s the kind of teacher I’m going to be. There are some things those teachers did in that [lesson] I use in my classroom, so I got materials and ideas of ways I can teach students or actual activities to do with students from other teachers.” However, it took having the opportunity of experiencing both to truly impact her.

Structured had emphasized that he was a hand-on kinesthetic learner. He said his learning experiences were most affected by the laboratory portions of his animal science classes. “Those animal science classes that were hands-on, like the swine production, the beef cattle, livestock judging, the horse judging class that I took, you know?” With his

very professionally toned voice, he said that the ag science classes that were within his department were more leadership focused and they were focused on how to operate within a school setting, but he said in his experience most of the ag chapters were livestock focused. "And like where I work now…that stuff's great [ag science classes] but we are able to hook a lot more students with the livestock carrot, if you will." He said he did take a lot away from his educational psychology class, but out of all of his classes, the animal science classes, the actual livestock judging, the classes where you really got to work with animals was where he found the most meaningful learning. "Whether it was working out there in the greenhouse doing the garden science stuff or at the beef center, or…doing the swine, you know, pairing out the sow and having to take care of the little pigs and stuff. I mean, I got more out of that because that's the type of learner that I am."

For Brief, sitting on the couch in the lobby of the agriculture building on campus and with an air of been-there-done-that, she remembered coming out of high school preferring the sciences and laboratory based exploratory classes. She found her preservice courses with hands-on learning experiences to be the most meaningful. "If a class had an operational feature now where you had to learn about your ag science program…and learning to do a record book and things like that…very application based things I think helped [me] learn about POAs and things like that."

When recalling her student teaching experience, Brief said she learned a lot from her cooperating teacher. "Just kind of seeing how she did things in her classroom, management skills, and her policies, and I still-I mean, I do those things in class that I

learned. They still work." She said one of the most meaningful things she picked up from her cooperating teacher was using student notebooks. She said she also feels like having a longer student teaching experience would have been better because when she was on the student teaching block it was four weeks. "I feel like I could have been there [at school] getting to know kids and I know it's kind of hard because you don't get to see like the first day of school. I student taught in the spring and so that's not technically the first day of school."

Because she didn't offer a great deal of elaboration, she was asked further. "Would your preservice program have been more meaningful if the activities and the way the instruction was delivered was more hands-on versus a lecture type?" She thought for a moment, and then replied very matter of fact, "I think we did do a lot of hands-on things. But, I mean, I still think we could have maybe gotten more in-depth in just some other things than…lesson plans, like lesson plans again not quite practical and [not] so real world because there are so many different ways, you know, like you can put on the computer and things like that and they [administrators] might tell you, oh, you can do whatever you want. Okay."

So whether it was the student teaching experience, observing other teachers in the field, or participating in hands-on laboratory activities, all four of the participants shared that their most important experiences that were the most beneficial and most impactful were the ones that were hands-on. While some of the participants had these experiences either student teaching or during methods classes observing others found them during agricultural science classes in animal science. No matter the context, the

message was the same. Hands-on and in person experiences have stayed with them longer and helped motivate them to be the teachers they are today.

Theme Number Two: Lack of Preparedness

All of the subjects agreed that preservice coursework without hands-on components were less meaningful compared to those that had hands-on components. With special education, all of the participants said that what they now know, they mostly learned either student teaching or on the job. What was heard over and over, however, in their own words was that they did not feel prepared.

Studious responded, when asked about her familiarity with IEPs, "More so, I feel more comfortable than when I started, and like I said, I don't think it really sunk in until I really started my student teaching." Studious said that during her student teaching experience, she was faced with a special needs student. Not knowing what to do, she consulted her cooperating teacher. "And so now I'd view like different modifications and things I guess in a different way and I think I teach in a different way so that it's easier for everyone, including myself, as far as…prep and getting material across to everyone." When asked if her coursework at [the land grant institution] could have done more to prepare her, her answer was simply and directly, no. "I can't think of any specific way in how it could have prepared me better. Honestly, I think it just has to be one of those things where until you face it you don't know how to deal with it."

Studious said that it would have been more meaningful to her to have been exposed to special education more during field experiences. "And I don't know if maybe

it would help if you saw those certain things and spoke to a teacher during your observation or something like that."

The researcher then asked her, "And if you had more time in say methods or had a longer student teaching experience you could have [learned more about teaching special needs students]?"

"Yeah, I think the preparation and as far as just kind of being exposed to it more. And I don't know if maybe it would help if you saw those certain things and spoke to a teacher during your observation or something like that. I mean, I don't know."

When asked her about feeling prepared, she said, "No. I mean, they can tell you all day long…this is how you're supposed to do it because until you're really in the classroom and it's your responsibility, it's just different."

"It's not as meaningful?" the researcher asked for clarification.

"Right, yes, yes, 100%!" She exclaimed. "And especially doing it to the extent of what they need yet still challenging them. Not allowing them to just…I think a lot of times people or teachers make it too easy. And I try really hard not to," and with a very earnest look and a nearly emotional tone in her voice, "but sometimes there are days when it's just for survival you almost have to make it as simple as possible." While saying this she had a defeated look in her eyes. I could tell that she was a teacher who wanted to do her very best at all times, but this admission brought home the reality that despite her best efforts, sometimes she still felt like she wasn't doing her very best, but she caught herself maybe sharing a little too much into her own feelings of never quite feeling good enough and quickly snapped back to the question at hand. "But exactly, as

far as it being—it's not meaningful to you until you're actually in the position, I don't think." And she smiled.

Ms. Confident said that information about special education was mentioned in her "educational psychology or educational something, I can't remember." It was mentioned there but it was just a required class she had to take, and having observed Ms. Confident throughout our interview, I knew that she did not take her coursework lightly. This was my all-business, calendar within arms reach at all times participant. So, her response was even more meaningful to me. Outside of her coursework, she said that while on the block a person ("some guy" as she referred) talked about special education a little bit, but there wasn't enough time spent on the subject of special education for it to be meaningful. She said she didn't begin to truly learn about special education until she had her own classroom. "I really learned all that when I was working with a counselor." She also talked about learning while serving on the ARD meeting committee. "When I was sitting at our meetings, that's when I learned it, and that's not where you want to learn it, when…parents are sitting in front of you, you know, and quizzing you."

However, she did want to make very clear that her lack of preparation had nothing to do specifically with the land grant institution, her department, or her chosen teaching profession. She has mentioned that she had served on the RTI committee. RTI stands for refer to tier intervention.

Based on serving on this committee, I asked her, "So you say you were on the RTI committee, so you're obviously working with other teachers who had gone through other disciplines…"

She quickly cut in and replied, “right.”

I went on, “Do you feel, can you explain to me if you feel they were more prepared for those things than you, or were you all learning it at the same time?”

Without missing a beat, she asserted, “They weren’t more prepared I think. I mean, I felt like I knew more about this stuff than other teachers did. And I don’t know if that’s from my master’s in counseling or what, but they didn’t know any more than I did, I don’t think. And the special education teacher, yes, she did. But other teachers like the math teacher or the English teacher, no, they didn’t.”

Leaning in and wanting to make her next point very clear, she said in a proud voice, “So I didn’t find that [the land grant institution] did me a disservice. I just, I mean, I just felt like maybe we should have more about special ed. But I’m not blaming [the land grant institution] for doing me a disservice. But I don’t know how well [the land grant institution] could cover that unless there was a class just about special education rules and laws, because it’s very specific on—there’s a lot of that, you know, special ed’s not the only thing that you don’t learn until you’re in a job, and I think that’s probably with every job.”

Structured goes further into how not being prepared to teach special education his first year made him feel overwhelmed. “That was the toughest thing, I think, just dealing with that and then the whole aspect of laws and that we have to follow [them] within the school.” He said he felt that as an ag teacher one might get every single life skills or special education student in your class. He said he had many put into his classes his first year of teaching, and taking into account this young man’s demeanor, the

impression I got from him was that not feeling 100% prepared made him very uncomfortable. As he discussed this and explained his experience to me, his body language began to change. He moved from his leaned back, leg-crossed position to a leaned in, both feet on the floor stance. I could see that he was very determined to explain this to me because it was important for me to understand that feeling not prepared was not okay with him.

"And they put them all in my class first year teaching. And I had some interaction working with them in a shop setting, but I mean, there's just so many different disabilities out there. I mean, if you have all these different types of kids and you're the only one and you don't get any help, you know, you kind of feel like, well, I have 15 students over here that I want to go out and [do] something within my greenhouse or in the ag barn, but then I have five of my life skill students but two of them can't trust him with anything because they might hurt themselves or hurt someone. And you have your head on a swivel trying to make sure that you serve all of your students, and then the paperwork aspect of it." Simply put, he said, "my first year it was very overwhelming."

Structured did say that he had taken a special education class at a local community college while enrolled at the land grant institution. He recalled it being a good class because it exposed him to the ideas of disabilities and the types out there, but he explained, "unless you interact with those students on a daily basis…reading a book is not going to help." He says that what he knows now about teaching students special education he learned on the job. "That's 100% true. I was I guess mentally prepared to

handle those students but I didn't really…because I didn't have a whole lot of interaction with them, I didn't know what would work and what wouldn't work. I feel I wasn't prepared enough." The anxiety clearly heard in his tone.

Brief was much more blunt when asked if she felt her preservice program had prepared her to work with special education students. Her reply, simply put, was "no." When the researcher pressed her to find out if she was at least comfortable with working with students disabilities she replied, "Not really, no." She explained in detail how during her first year or teaching she had 15 students in one horticulture class. She said the students ranged in ability greatly. "I had two students who couldn't even talk." She said she would ask them if they wanted to color, and it was unnerving to hear no response. It was difficult for her to have 15 students who ranged from average students to those that were so disabled they couldn't even speak. "I had an [instructional] aid but still like I felt like I'm not being able to give these kids enough time and so they might maybe not be getting to do the activity or [even] able to do the activity." She said it was a frustrating feeling, especially trying to figure out which activities they could or could not do. "I don't know, like I just don't feel—I just didn't feel very prepared."

"And so looking back at your classes, did any of them teach you anything about special needs or how to teach students with disabilities?"

"No."

"None?" the researcher asked.

"None," she said flatly." Like we had one…class, which is like special topics and they basically in that class just kind of went over all of like the disabilities that you could

possibly see. And I know sometimes on the block like we had somebody come in and like go around and give you little scenarios like what do you think you can do here? But you know, I got into teaching and they like give you this accommodation sheet and it's like you're supposed to know like what the heck's going on?" She said with exasperation.

"Like the first one wasn't so bad. I mean, I'm a smart person. I figure it out," she flatly stated but explaining the feeling of looking at that first modification page she described her feeling of being overwhelmed. "We went to a new system and it's more computerized, but still like they give you the code and then at the bottom you…see what it's for but then there's umpteen other things on that page and you're like, I don't know. I have no idea. You know what I mean?"

IEPs, Accommodations, and Modifications

Another question that was asked all of the participants, was did they enter their teaching career understanding what an IEP was? Overwhelmingly they all said they had heard of it, but they didn't really understand what it was or what it meant to them until either they figured it out on their own or someone at their school district sat down to explain it to them.

Another aspect of serving special education students is understanding what accommodations and modifications each student will need. For today's educator, accommodating students through differentiated instruction is being heavily promoted for all students.

Studious explains that at the beginning of her fourth year of teaching, she is obviously more knowledgeable and comfortable with IEPs but that the actual concept did not sink in for her until she began student teaching. She said her preservice classes probably could not have done much more to prepare her. “I can’t think of any specific way in how it could have prepared me better. Honestly, I think it just has to be one of those things where until you face it, you know?”

“How familiar are you with IEPs now?” I asked her.

“More so, I feel more comfortable than obviously when I first started,” she said matter of factly.

She went on to explain that that she typically has one to two students with disabilities in each class. As she spoke, she reflected back on her first year of teaching. Her tone then changed from matter-of-fact to a tone that was had a regretful feeling to it. “There have been things as far as lower reading levels and actually my first year I was teaching an eighth grade class, and I actually didn’t get my red binder of everything, oh, it was probably October.”

“And that was around the first six weeks or so. And I had absolutely no idea, and I was never told. So it wasn’t until these grades were actually reflecting basically what these student shouldn’t have, you know, that the principal came to me and said, you know, you have to adjust this, you have to figure out a way to accommodate these kids. And I said, oh, well, thanks for letting me know. That’s good to know *now*, thank you,” she said with a very sarcastic tone.

“From there I was a lot more aware. Much more aware, actually,” she said.

Ms. Confident, when asked about whether or not she had learned about IEPs while at the land grant institution, responded that it was mentioned. She also said she remembers hearing it mentioned while on the block, but again, it was such a brief discussion that all she remembers is hearing the acronym and not what it referred to. She said she had heard the term but didn't really understand it until she was "on the job."

I asked her, "So when you say that you learned it on the job, did you go to any professional development workshops or was it just something that you learned once you go your own classroom?"

She thought for a moment, and then replied, "I think it was when I was in my own classroom, and I just started quizzing people. And when I was working with the school counselor…and I was put into those positions where I needed to know that information, and when I did modifications, that's [actually] when I learned it. I didn't go to any professional development for special education. I think there's something that should be offered at teacher's conference, but I really learned all that when I was working with a counselor."

To explain more specifically, she went further. "And then when I set up my IEPs, or not the IEPs, the [paperwork for ARD meetings] when I was setting our meeting's that's when I learned it. And that's not when you want to learn it when you're parents are sitting in front of you, quizzing you."

Structured, when asked about his working knowledge of IEPs after graduating from the land grant institution, said that he thought they stood for Individualized

Education Plan, which I confirmed for him that was correct. He said during his preservice training he recalls seeing a type of one but briefly.

"Not really to the point where I could go right to it and find exactly what I needed. I mean, I had seen examples of one briefly. But it was not like, oh, I know exactly what I'm looking for and I know how to reference each kid's IEP and what's going to work best, and that was something that you know in interest of full disclosure I was not as good about doing, you know? I was just not that good at doing that."

However, Structured said that he was familiar with modifications and accommodations due to his previous personal experience at the secondary level as a student. "I was more familiar with modifications and accommodations because of my peers in high school and what I recognized they had because as a high school student I'm sitting down to take a chemistry test and this guy, you know, four or five answer choices on each question, and my buddy sits down next to me and he's go two answer choices or three, well, you know, I think to myself, well, that's not fair. Why does he get to have [that]?" He laughed as he recalled the story, but then his tone became serious again, "And then as I learned more about learning disabilities and what-not I realized the reasoning for that."

But he quickly added, "But it was not really hit on [in college], harped on, talked about as much. I mean, that was my experience with it," and he settled back comfortably in his chair again.

Brief also stated that she had heard the term IEP while on the block but during her preservice coursework it wasn't touched on at all. For Brief, she did not learn about

accommodations and modifications during her preservice coursework, but rather while student teaching because she had a student at the time with accommodations. However, even with that experience, she said she still feels like she needs to go back and double check her modification pages just to make sure she's doing all that she should.

Studious shared that when she first began student teaching, she didn't understand how to follow an IEP or modification page at all. "There was one particular student and I didn't really understand how I should modify certain things or work with her specifically. So that's when I went to my advising teacher and I said, look, what do I do, like how am I supposed to do this?" She said since that experience she views modifications much differently. When asked if her preservice coursework could have prepared her better, she simply said she didn't see how. She said until you face it, you don't know what to do with it. "They can tell you all day long, you know, this is how you're supposed to do it, this is why you're supposed to do it…until you're really in the classroom and it's your responsibility, it's just different."

Having to Learn on the Job

However, one thing that Studious shared, was that once she was able accommodate her special needs students, particularly those in the eighth grade, when they came to her class as a freshman they felt more comfortable. She said they were also more personable and excited to be in her class. She says she tries to adjust for special needs students by making her lessons more hands-on as opposed to having lots of writing activities.

Ms. Confident agreed that the term "modification" was mentioned at the land grant institution, but as mentioned with the IEPs, it felt to her like an afterthought that was rushed through on the block. However, she says that while on the job she felt as much prepared as teachers who had gone through other preservice tracks. "I don't feel like [the land grant institution] did me a disservice. I just, I mean, I just felt like maybe we should have more about special ed." She said that even though she feels more should be taught, she was not sure how.

Ms. Confident shared that her preservice program was good in that it gave her skills. "I mean [the land grant institution] gave me the skill that I'm able to figure things out. And I think that's why I've been able to figure out how special education works, and I've learned all the, not all, but I've learned what I need to know from IEPs and ARDs and through RTI to help me work with these students. So I feel I was given skills but it was never, here's some skills for—does that make sense?"

Structured shared that when he was handed his special education paperwork his first year, he "kinda had an idea" about it but he didn't feel that he could look over it and find what he needed to find with confidence. Again, he did take a special education course at a community college and special education was covered briefly while he was on the block; however, he said referring to each kid's IEP and structuring lessons, tests, and "all that stuff to where it's really going to I guess fit that IEP."

In his own words, he said, "Because sometimes I would see them doing that thing [the modification], and I was like, hold on, you're supposed to this [the modification] but you're doing just fine. And so again, that makes me kind of question

why they have that IEP." As a special education teacher, to hear one of my interviewees make such a bold statement was concerning. Also concerning to me, was his belief that during the ARD process, which he readily admitted he had served as a committee member on, that students were given the choice of which accommodations and modification they need. He felt that students took advantage of the process and requested unnecessary things. "Do you think you need this aid, or do you need this? And they would just ask the kid. And so it's kinda like, well, if I was a kid and they asked me, well do you think you need extended time for your tests? Do you think you need larger print? Do you think you need this, this, and this? I would just say, yeah, yes to all."

Brief readily admitted that she referred to the modification sheets, but she just automatically accommodated and modified for her students as necessary. The most laid back of all of the participants, her nonchalant manner made her seem more comfortable with special education than she really was.

"I think that like teaching ag we are able to do like, how I like to teach [is based on] how I like to learn, and we do a lot of hands-on stuff," she explained. "And I never make the kids really take notes verbatim and things like that. I think that's helpful to those other kids, and again like I haven't seen a whole lot."

She did get somewhat excited when she shared that she wasn't going to be teaching the life skills horticulture class again, and upon realizing that she was excited she began to feel guilty about it. "I know that's sad, but I just realized that everyday was stressful for me when I was trying to teach that class."

The researcher asked her why she felt stressed out when teaching that class, and she shrugged, “Just because.” She paused and then went on, “Just because of the first year like, because I felt like I didn’t have any training in like how to teach kids with [severe disabilities], you know like having a few kids, [well] the two kids who couldn’t speak to me.”

Theme Number Three: Room for Improvement

Lesson Planning

Studious said that learning to write the “long lesson plan” was somewhat useful to her, but for the most part, it wasn’t. “I’ll set up my lesson plans and I’ll figure out a way what I want do it. But it’s not until I’m in the classroom that I actually know how I should teach that class that day.” She said she may have more than one section of a class, but depending on the students in that particular way, she may change her approach. “It’s going to alter between class, and yes, and between students.”

For Ms. Confident, the long lesson plan did not cover how to reflect or prepare for modifications or accommodations. She said that during her student teaching experience, her cooperating teacher had to guide her. “I honestly probably didn’t do lesson plans with modifications like I should have, but it was because I didn’t have that information.” She says now when she develops a lesson, she begins by looking at the big picture. “Every student learns differently, and so when I’m developing a lesson I try, I really, really try to develop lessons that have different activities for those visual learners and for the tactile learners, and you have to think about Gardner’s multiple intelligence

theory. And when you do that, it really helps to create a lesson that's different in each area."

Structured said working closely with other teachers in his district has helped him develop lessons to accommodate learners, but "unless you're involved in the school world, I mean it changes year to year, like even if you're out a couple of years, a lot of things change." He said that the three R's have changed. "They say that the three R's are now Rigor, Relationship, and Relevant, right?"

He also said that there were many things that were focused on during his preservice classes that helped him but developing lessons was not meaningful. "I guess I learned some things I could use while I was doing my lessons especially in a hands on environment that would help those students. I feel like we focused a lot on things that almost didn't matter that much. And I hate saying that, it just killed me to say that because I believe in the program, but things like filling out lesson plans correctly."

Brief elaborated further. "I know it's important that you learn how to write a lesson plan, but in actuality, you don't write lessons like that…like a full blown lesson plan with five objectives, you know, like I don't have room to put five objectives on the board for each class." Not that she says writing out lesson plans is bad. In terms of planning, it is helpful, but the long lesson plan is not time efficient. "Once you get past the first lesson, you need a more practical way to write a quick lesson plan."

Repeated Information or Lack of Information

Studious stated that during her preservice coursework much of the information was repeated. When asked to recall the classes she took, she replied, "See, that's the

problem. I can't differentiate between a lot of them." She also said, "I do think that some of the information was, it was repetitive…for the most part." She felt like much of the information was necessary but until one got into their own classroom, it wasn't as meaningful.

Studious did state that upon hearing from friends about information given to preservice teachers at other institutions, she wished she had been given the same information as well, such as filling out purchase orders and meeting deadlines. "I think maybe if we could have maybe focused a little more on that and how to adjust and different strategies and tips, and along with those little details. Because those little details are such a big deal to those students."

Ms. Confident also felt that much of the information on the block was rushed through and simply touched on. "We had a guy come in and talk about special education a bit, but it was like a one hour, two hour workshop thing. And it wasn't enough time spent on that for me to understand what I was doing in special education." She also lamented about what was missing from her preservice experience. "I mean there was talk of there's thousands of dollars in scholarships for your kids, but there was never this is how you fill these out. Things like this is how you fill out a roster, this is how you do fundraising. I mean those things you don't learn until you get in a job."

She also said that her preservice program did not prepare her for the amount of time she would spend at her job as an ag science teacher. "It takes a lot of time and that's one thing no one ever told me."

For Structured, having time to visit with teachers who had already been through their first year would have been a great addition to his preservice program. “Someone that dealt with that first year troubles and is coming back for round two or three, something like that, and then has some advice on dealing with that type of thing. Speaking with teachers that maybe have [had] to deal with ornery administration that doesn’t understand them, or something about dealing with parents because honestly we didn’t discuss that at all.” He also said that he felt the preservice program focused so much on the classroom aspect that it didn’t adequately cover FFA and SAEs. “And we didn’t neglect the FFA portion in terms of like how it’s structured, but how you as a teacher need to implement the FFA so that it grows and it’s a part of your program. The reason kids get into ag should be because they want to get into FFA.”

When reflecting on what was covered Structured said, “But I just feel like we focused repetitively on things that now I really don’t use as much.” He also felt that the preservice program he went through was not innovative enough to meet the demands of teaching this generation of students. “As ag teachers we’re supposed to be the cream of the crop, the sharpest on the campus. We work the hardest. We deliver the instruction and the experiences that these kids get nowhere else, and if we’re going to be just like everyone else, then we’re just a talking head up here just saying whatever and just filling the gaps. That’s not going to do it. I mean, it has to be the experience factor. But that [millennial] generation, you know, they’re looking for experiences.”

For Brief, she felt she learned some useful things in her preservice classes, but in terms of teaching students with special needs, she said it was never touched on. “I mean,

basically, they just talked about what are your objectives and like your intro and like know your activity and your closing, but never really talked about, never really hit on special ed kids. Like it wasn't really hit on." She said most disappointing was an experience during her first year of teaching. She had a student who could not speak. "I felt like I didn't have any training in like how to teach kids with [severe disabilities], you know like having…the two that couldn't speak to me." She said she felt that she survived that experience because of her own resourcefulness, but she still feels inadequate when teaching students with special needs. "I mean, I kinda feel I wasn't giving them enough in class." Brief also said her preservice experience did not give her strategies for using different teaching techniques. "I mean, we talked about different ways you could possibly like to teach, but maybe like a lecture or power point."

CHAPTER VII

DISCUSSION, CONCLUSION, AND RECOMMENDATIONS

The purpose of this study was to examine the preservice agricultural science certification program at the land grant institution and evaluate its effectiveness for preparing future teachers for the rigor of an inclusive classroom that would include students with disabilities. The question that guided this study was: What were the voices of agricultural science teachers regarding their preparation to meet the needs of special education students in agricultural science classrooms?

Four second and third year agricultural science teachers in Texas were chosen to participate in this based on their years of teacher in relation to their time in the preservice program of a major southwestern land grant institution and their experience level working in an inclusive setting with special education students. Each participant was interviewed using a semi-structured interview. The interviews were transcribed, analyzed, and yielded three major themes: learn by doing, I didn't feel prepared, and room for improvement.

During this chapter, each theme and subtheme will be discussed and then will be followed by conclusions. Finally, the chapter will close with a list of recommendations based on this study.

Discussion

Theme One: Learn by Doing

Each participant specifically talked about their personal experiences and how those experiences that were hands on, where they were actually synthesizing processes and actions were the most meaningful. As we compare our participants' answers to the literature, we find that this study supports the literature that hands-on activities are the most meaningful. Table 3 highlights some of their quotes in this theme.

Table 3

Theme 1 Learn by Doing

Participant	Quote
Studious	"You know I felt like I learned a lot during student teaching. More than any of the classes really have taught me."
Ms. Confident	"[Observing] it opened my eyes to how you can do things, but then I had a lot of experiences where I was like 'I'll never do it like that,' or 'I will never be that kind of teacher.'"
Structured	"The main thing that I can really remember drawing as my experience student teaching…I was involved with the ag mechanics and all that kind of stuff. So we had students in their that were learning disabled and had disabilities and what not, and through my interactions with them I learned how to, I guess I learned some things that I could use while I was doing my lessons, especially in a hands-on environment that would help those students."
Brief	"If a class had an operational feature now where you had to learn about your ag science program…and learning to do a record book and things like that…very application based things helped [me] learn."

Ronfeldt and Reininger (2012) reported that more emphasis was being placed on clinical experience, including student teaching, as a key component of teacher preparation. Shulman states, “In nearly every form of professional education, students perceive the practicum experiences as truly valuable, while barely tolerating the academic experiences,” (1998, 517). In other words, student in preservice programs take the classes required but do not understanding the why and how of those classes. They get through them simply to get to the next step.

Purpel (1967) says that it is during student teaching where a preservice teacher is allowed to rehearse the role of the teacher and gain an insight into the daily school activities, but a second purpose of student teaching is so that preservice teacher can develop their own teaching style. Student teaching experience is the most widely utilized way that colleges and universities link education teaching and learning theories to the reality of daily classroom practice (Bacharach, Heck & Dahlberg, 2010). “The notion that formal professional knowledge is rooted in an academic knowledge base creates the conditions for the essential pedagogical problem for professional education,” said Shulman (1998, p. 517).

Kessell, Wingenbach, and Lawver (2009) concluded that if the student teaching experience is designed to enhance preservice teachers’ skills and abilities for educating all students then a greater emphasis should be placed on the knowledge of inclusion strategies such as those found in general education student teaching programs. This study also found that student teachers felt that if they had to teach special education students in agricultural classrooms and laboratories and had spent time with a special

needs person outside an academic setting, that student teacher would experience statistically significant positive confidence in teaching special needs.

The fact that personal experiences made their education more meaningful was supported further by two participants who share comments about their previous experiences with special needs students prior to their student teaching. Structured stated that during his high school experience he remembered sharing classes with students who needed modifications, and Ms. Confident relayed that during her special populations class deaf and autistic people were brought in to the class to share their experiences. She said that drove home the point that people with disabilities not only exist but their issues are real. Structured shared, "I was more familiar with accommodations and modifications because of my peers in high school."

Preservice agricultural science teaching programs have an added challenge in that they are not only preparing future teachers for the role of being a classroom teacher but also an FFA advisor. The literature is also clear that field experience through field observations and student teaching is critical for the development of the preservice teacher. According to McDiarmid (1989), preservice programs must help future teachers understand how to relate the content-specific material to the learners; further, even though preservice agricultural science program differ in terms of course requirements and length of student teaching experiences, the preservice program pedogological design should help to afford "eased entry into practice," (Shulman, 1998, 518).

Theme Two: Lack of Preparedness

The second theme in this study focused much more on the special education component of teaching in a modern classroom, specifically the ability to prepare lessons and differentiate instruction. All of the participants reported feeling that they were not fully prepared during their coursework for the challenges of teaching special education students. Although, during their coursework, they were all required to take a class that focused on special education students, none of the participants reported that they could remember details about IEPs, modifications, accommodations, or differentiated instruction. Some did report remembering hearing those terms, but in practice, they all stated that they did not feel prepared. What they knew about special education and special education students, they learned during the student teaching portion of their preservice program and during their first year of employment, which, as they reported, left them feeling inadequate and frustrated. Table 4 shares some of their concerns.

Table 4

Theme Two Lack of Preparedness

Participant	Quote
Studious	"I haven't started a school year until this year where I've truly felt somewhat confident in what I was doing."
Ms. Confident	"I just felt like maybe we should have more about special ed. When I was sitting at our meetings, that's when I learned it, and that's not where you want to learn it, when…parents are sitting in front of you, you know, quizzing you."

Table 4 Continued

Participant	Quote
Brief	"I just didn't feel very prepared. Just because of the first year…I felt like I didn't have any training in…how to teach kids with [disabilities]."

According to Shulman (2007), good teaching has four main dimensions that must exist concurrently. Those dimensions are intellectual, practical, emotional, and moral. Beginning teachers must have a good induction program to help them develop those skills, yet most schools [primary and secondary] do not offer adequate induction programs to help them grow in these areas (Ingersoll, 2012). Beginning teachers experience a range of highs and lows and report feeling inadequate (Schoffner, 2011; Eckola, 2007). Beginning agricultural science teachers receive little support with their programs (Greiman, Walker & Birkenholz, 2002).

According to Darling Hammond (2009), there is a long standing disconnect between teacher preparation programs and what actually happens in schools. This is also referred to as the practice transfer problem (Craig, 2012). In other words, what students learn in classes during preservice programs doesn't always translate into their real world experiences. As Shulman (1998) states, claims for knowledge must pass the ultimate test in practice.

Sub Theme One: IEPs, Accommodations, and Modifications

In a study looking at newly hired teachers, the confidence level of teachers when teaching students with special needs showed that training and support were key factors in success with special learners (Chester & Beaudin, 1996; Jung, 2007). Teachers with low self-confidence are more likely to refer to special needs students as difficult to teach

(Jung, 2007). Also, the new role of being an inclusive teacher has also demanded a need for more understanding of students with special needs (Brown et al, 2008). A 2010 study also found that student teachers' were knowledgeable about Individualized Education Plans (IEPs) and general definitions, but they were not prepared to meet the challenges of accommodating special needs students in agricultural education classrooms and laboratories (Kessell, Wingenbach, & Lawver, 2010).

Again, this was echoed in the voices of my participants. All of my participants recalled hearing the terms IEP, modifications, accommodations, differentiated instruction, and inclusion. However, none of them recalled feeling knowledgeable with regards to those terms. In fact, they all reported learning what they know now to their experiences while on the job as also shown in Table 5.

Table 5

Sub theme one: IEPs, Modifications, and Accommodations

Participant	Quote
Studious	"I don't feel like it was until I truly went into student teaching and I was actually in the classroom working under those teachers that they actually taught me and explained to me in more detail."
Ms. Confident	"But when I started it was a learning curve for me. Because IEPs and modifications that was mentioned in my educational psychology or educational something, I can't remember…it was mentioned there but it's not like the professor spent a lot of time discussing IEPs with us."
Structured	"It was not really hit on, harped on, talked about as much. I mean, that was my experience with it."

Table 5 Continued

Participant	Quote
Brief	"But you know I got into teaching and they like give you this accommodation sheets and it's like your supposed to know like what the heck's going on…I'm a career tech teacher so you have to have one of your ARD meetings and you go in there and you're supposed to like know all of this. I'm like a first year teacher, I'm like, this is kind of scary and overwhelming."

This is again found in the literature. Dee (2011) found that preservice teachers have an underdeveloped or inaccurate understanding of special education and its terminology.

Sub Theme Two: Having to Learn on the Job

Brown et al (2008) cited several studies that found that teachers today often lack the preparation and experience in dealing with students with special needs (Avramidis, Bayliss & Burden, 2000; Burke & Sutherland, 2004), exhibit poor attitudes toward the idea of inclusion in general (Daane & Latham, 2000; Lohrmann & Bambara, 2006), and are restricted by inflexible course material (Pisha & Shahl, 2005). Brown et al (2008) also said that these factors led to an inability to adapt instruction and assessment techniques to meet the needs of their students.

The participants in a 2009 study of AAAE southern region agricultural science teachers did not report feeling confident with regards to teaching students with special needs unless they had a previous history (Kessell, Wingenbach & Lawver, 2009). Also, another study found that secondary agricultural science teachers in the study indicated they needed to learn more teaching techniques for inclusion (Hoerst & Whittington,

2006). Another study reported that teachers felt they are able to provide quality instruction to learning disabled students, however they "generally disagreed that their teacher training program prepared them to work with students with disabilities" (Stair, 2009).

Further, Hoerst and Whittington (2006) found that preservice agricultural education programs needed to include more instruction about how to "operate an inclusion classroom," in such a way that it focuses on using methods of teaching that are positive with regards to students with special needs. This same study also found that agricultural education must "integrate inclusion processes into the programming, such that it is an area of education that is recognized as supporting the diverse needs of learners," (Hoerst & Whittington, 2006, p. 50.)

Finally, in a study looking at newly hired teachers, the confidence level of those teachers when teaching students with special needs showed that training and support were key factors for success with special learners (Chester & Beaudin, 1996; Jung, 2007), and being able to solve problems and understand individual student needs is considered a 21st century skills that educators need in order to deal with a changing student population (Young, Grant, Montbriand & Therriault, 2001).

According to Stair (2009), many teachers are not trained to work with students with disabilities. One study found that the lack of successful inclusion in schools was related to the lack of "well-aligned inclusive preparation in universities," and teacher education preservice programs play a role in how well prepared teachers are for handling an inclusive classroom (Young, 2011). Another study reported that teachers are more

confident when they are exposed to inclusive classrooms during their preservice training programs (Brown, 2008).

Kessell, Wingenbach, and Lawver (2009) found that for agricultural science preservice teachers there is a need to at least help student teachers feel more confident in developing lessons that include all learners, specifically the special education students. Their study also found that agricultural classes are noted for being very diverse, and many times, agricultural interests, ability levels, maturity, and home backgrounds of students in a single class differ. With these challenges in agricultural science classrooms, they state, "We should become better leaders and practitioners for inclusive strategies for meeting the needs of special education students," (2009, p. 60). Stair (2009) also found that teachers feel they are able to provide quality instruction to learning disabled students, but they generally disagreed that their teacher-training program prepared them to work with students that had disabilities.

Again, the voices of my participants echoed this sentiment that because of a lack of preparation during their preservice training, they found themselves having to learn on the job either from relying on their own resourcefulness of from other teachers and counselors at their schools. They also voiced that they learned much of what they knew prior to teaching was learned during their student teaching experience. Table 6 highlights some of their more memorable quotes.

Table 6

Sub theme two: Having to learn on the job

Participant	Quote
Studious	"And around the first six weeks or so, and I had no idea, and was never told. So it wasn't until these grades were actually reflecting basically what these students shouldn't have, you know, that the principal came to me and said, you know, you have to adjust this, you have to figure out a way to accommodate these kids."
Ms. Confident	"I think it was when I was in my own classroom, and I just started quizzing people and when I was working with the school counselor…and I was put into those positions where I needed to know that information, and when I did modifications, that's [actually] when I learned it."
Structured	"Yeah, and again, all those things I had no clue until I got into it…I mean, I didn't know how to do all this stuff. I mean, what…the law require[s] you to do because ultimately the teacher is liable."
Brief	"I learned some useful things in my classes, but there's just still so much more…and even with everything you have to do as a teacher they don't tel you that in college. You just kind of just figure it out like about paperwork and things like that."

Theme Three: Room for Improvement

Because all of the participants reported feeling under prepared and had other issues relating to their preservice program, they all agreed that changes were needed in order to help make the program more effective in giving agricultural science preservice teachers more 21st century skills for teaching special education students. They all agreed

they loved the university they attended and enjoyed their professors, but they also had some strong feelings about coursework that was tedious or unnecessary as it pertained to preparing them for the real world of teaching. Table 7 shows evidence of this.

Table 7

Theme Three Room for Improvement

Participant	Quote
Studious	"Certain things on the student teaching block that if we could have gone maybe a little bit more in depth on as opposed to having just that quick little time with everything just kind of being thrown at us when we're about to just go out and student teach anyway, that was kind of…that was overwhelming."
Ms. Confident	"So, I didn't find that [the land grant institution] did me a disservice. I just…felt like maybe we should have more about special ed."
Structured	"But I just feel like we focused repetitively on things that now I really don't use much."
Brief	"I mean, basically, they just talked about what are your objectives and like your intro and like know your activity and your closing, but never really hit on special ed kids, like it wasn't really hit on,"

The literature finds that adapting instruction and making modifications to contents for special education students often represents a new skill for veteran teachers and (Dee, 2011). Dee also states that research and current beliefs surrounding inclusion and differentiated instruction in the area of teacher education may lead to effective changes in methods and strategies as well as in required coursework in teacher preparation programs, and preservice teachers must develop the skills required to meet the needs of special needs of special populations of students (2011).

Furthermore, research in the areas of inclusion, students with disabilities, and differentiation, adequate preparation is deficient (Dee, 2011; Andreasen, Seevers, Dormody & VanLeeuwen, 2007). A study of a southwestern university found that preservice agricultural science teachers reported that knowing inclusion competencies and special education teaching skills to strengthen was essential to improving the preservice program (Andreasen, Seevers, Dormody & VanLeeuwen, 2007).

Strong teacher education has been seen as the answer to providing a high quality workforce that some see as the answer to our nation's prayers with regards to social and economic woes (Levine, 2006; Craig, 2012). Craig (2012) further notes that teacher education has been driven by supply and demand and shaped by current issues and that teacher education, he contends, has changed over the years but as theoretical gains occurred a growing disconnect emerged between what happens in teacher education and what happens in today's classrooms.

Conclusions

The conceptual framework for this study is program theory evaluation. When faced with answering questions regarding a program's effectiveness, value, and worth, program evaluation is utilized under the concept that good evaluation is an essential part of a good program (Fitzpatrick, Sanders & Worthen, 2004). Based on this study, it is determined that the preservice agricultural science program at the land grant institution is providing coursework that provides a foundation with regards to special education for future agricultural science teachers.

This study supports the literature in terms of a lack of connection between theory and practice. The students all excelled in their coursework and were presented with information regarding IEPs, modifications and accommodations during a special populations class that was required, as well as information about lesson plan development during an agricultural science course and during the student teaching block. However, none of them could recall specific details about those topics when asked in this study that they learned during their coursework. This shows a disconnect between what they learned as students in a classroom versus what they learned while in the field. This presents an area of need for the program in that a way to bridge the content and the experience is necessary to make the required coursework more meaningful.

Looking at the actual degree plan, each student participating in the agricultural science degree plan was required to take a three hour special populations class through the interdisciplinary studies department and three hour agricultural science course that focuses on field observations and special populations. Therefore, students have six hours during the program that specifically focus on special populations.

Students in the preservice program must take an introductory course that is designed to prepare students for teaching secondary agricultural science. The course syllabus contains units on student engagement and diverse populations. Also, during the preservice program students are required to take educational psychology and two three-hour agricultural science courses. The first agricultural science course is designed to teach students about FFA programs and SAEs, while the other course focuses on lesson plan development and instruction.

At the conclusion of the agricultural science degree plan is the student teaching block. All participants agreed that student teaching was a good experience, and they felt they had gained the most knowledge about teaching from this experience. However, they were in disagreement about time on the "block." The "block" is the four weeks prior to field experience. Participants said that information was presented either too quickly to be meaningful or the information presented was repetitive. One participant, Studious, also noted that this was a stressful time worrying about the actual student teaching assignment, hurriedly preparing lesson plans, and worrying about assignments.

Based on the course requirements, the preservice program at the land grant institution is providing coursework that is designed to prepare future teachers with information about special education, engagement strategies, and lesson plan development. Yet, the participants responded that they did not feel prepared with regards to teaching special education students. Moreover, the participants all agreed that they had heard the terms differentiated instruction, modifications, accommodations, and IEPs, yet even after having completed the preservice program, did not feel that they had good working knowledge of the meaning of those terms. What they did know, they said they had learned on the job. They reported not feeling prepared with regards to teaching special education students.

However, as much as the participants valued the student teaching experience, the student teaching "block" was not seen as a good educational experience by the participants. Participants enjoyed learning from mentor teachers and reported that most

of what they took away from their preservice program was learned during student teaching and methods classes as seen in Table 8.

Table 8

Voices of Participants Regarding the Preservice Program

Participant	Quote
Studious	"I don't think it really, truly sunk in with me until I really started student teaching, and there was one particular student and I didn't really understand how I should modify certain things or work with her specifically. So that was when I went to my advising teacher and I said, look, what do I do? Like, how am I supposed to do this? And so now I'd view like different modifications and things I guess in a different way, and I think I teach in a different way so that it's easier for everyone including myself as far as like prep and getting materials together."
Ms. Confident	"IEPs and modifications that was mentioned in my educational psychology or education something, I can't remember. Educational psychology I think was the name of it. It was mentioned in there but it wasn't like the professor spent a lot of time discussing IEPs with us, and that class wasn't even in the department. That was just a blanket class we had to take."
Structured	"The main thing that I can really remember drawing as my experience student teaching, I student taught a large, very large ag program. So we had students in there that were learning disabled and had disabilities and what not. And through my interactions with them I learned how to, I guess I learned some things I could use while I was doing my lessons, especially in a hands-on environment that would help those students. But in terms of something we learned in class, I mean, nothings really coming back. I feel like we focused on a lot of things that almost didn't matter that much."
Brief	"[Learning about lesson planning] I mean, basically they just talked about what are your objectives and like your into and like know your activity and your closing. But [the instructor] never really talked about, never really hit on your special ed kids."

Recommendations

Based on the themes addressed by my participants and an evaluation of the program there are several recommendations that developed from this study. These recommendations will be discussed at length below.

This study found that there is a disconnect between what is taught in classes and actual lesson plan development and action in the field. Therefore, it is recommended that the terms differentiated instruction, inclusion, modifications, and accommodations be used throughout agricultural science courses that are designed to prepare teacher candidates skills for teaching and entering the field possessing 21st century skills. The purpose of using these terms throughout those courses is to connect information that is learned in the special populations class, educational psychology classes, and others so that students can begin to make connections between theory and practice. During this study, the participants remembered those topics being mentioned in classes but then not touched on again. By simply using those terms in agricultural science classes regularly, it will make those terms more meaningful and keep the terms in the minds of those in the program. They will not become afterthoughts that were briefly mentioned, but rather part of their working knowledge.

Differentiated instruction is key to today's current educational culture. Based on the research from the review of literature, true differentiation is accomplished when a teacher is able to reach every learner at the present educational level in an effort to help them all achieve mastery of their personalized learning objectives. However, as this research has shown, simply mentioning a topic in class is not enough. Students in the

preservice program must practice it and observe it as well. This can be accomplished by the faculty modeling 21st century teaching practices and exemplify what is being required at a secondary level in terms of delivery, assessment, and engagement. The subjects all reported that they learned more from hands on experiences and direct observations. Faculty using the instructional strategies and engagement activities that the preservice teachers are expected to use can be a very key tool in bridging the gap between theory and practice. In other words, if differentiation is what is expected at the secondary level, then it only makes sense that students experience it at the post secondary level. Even in its simplest form, by the instructor simply saying during a welding class for example that the students are working at their own ability levels in an effort to differentiate the instruction would be an excellent way to use 21st century terminology at the post secondary level.

Another recommendation is when teaching lesson plan development in agricultural science courses the instructor should implement differentiated lesson plan objectives, give mock modification pages, and inclusion of more differentiated enrichment activities within their lessons. This is to show linkages between what is learned in the special populations course and lesson plan development for students with disabilities. The study by Kessel, Wingenbach, and Lawver (2009) cited that its respondents were comfortable utilizing cooperative learning, but beyond that did not commonly employ other engagement strategies. By requiring more engagement strategies during the lesson planning aspect of agricultural science courses, preservice teachers will be responsible for researching and implementing a variety of engagement

strategies that they can practice while on the student teaching block later. According to Bloom's taxonomy (nwlink.com, 2013), the higher cognitive learning domains are analyzing, evaluating, and creating. Preservice teachers should be encouraged to develop instructional strategies that foster this higher level learning and to utilize differentiated instruction to reach all learners at their current levels.

Furthermore, according to the Learning Pyramid (Stephenslighthouse.com, 2013) lecture is the least effective mode of delivery of instruction with hands-on application and teaching others as the most effective. Again, lesson plans should be developed utilizing engagement strategies that involve all learners at some level and employ student-centered learning activities that promote higher-level thinking and provide opportunities for practice and application. Students in the preservice program should be encouraged to utilize several methods of engagement and become comfortable practicing those methods while in the preservice program and under the guidance of university faculty and mentor teachers.

A third recommendation is that during the first week of observation, student teachers should be required to obtain a copy of modification sheets so that they have the opportunity to develop specific objectives related to the students they will be teaching during their student teaching experience. As this study found, modification pages are not always available to teachers at the beginning of a semester; however, it is imperative to ask the cooperating teachers and school special education personnel about them to be shared as they become available. This prior knowledge of student needs will also help them to develop engagement strategies and assessments that are suited to the students in

their classrooms and laboratories, specifically using engagement strategies that involve and reach all learners regardless of their ability. Again, this practice will bridge the gap between theory and practice as they will be reading modification pages, applying the modifications and accommodations for students requiring those, and focusing on differentiated instruction techniques to help reach all learners. Also, by having the student teachers meet with special education personnel they are learning to establish contact and form a relationship in order to better serve their students.

Finally, based on this study it is recommended that further studies be conducted to further evaluate the effectiveness of the preservice program. Since this study simply focused on teachers two to three years removed from the preservice program, one study suggested is to ask veteran teachers with 10 to 15 years experience about their experiences during their preservice program to gain a different insight. Also, based on this study, it is recommended that a quantitative study be conducted using a questionnaire prepared from the results of this study to reach a wider population. Other studies recommended would focus on 1890 university preservice agricultural science programs and another study focusing on 1865 university preservice agricultural science programs. Also, within a study it is recommended to ask faculty about preparedness of student teachers as they are completing their student teaching experiences. Finally, it is recommended to compare students from programs who have more field experiences such as six weeks versus a full semester, and finally, it is recommended to compare agriculture certification program field experiences versus field experience of elementary and secondary in other disciplines. The goal of all of theses studies is to ascertain what is

the best possible program scenario to prepare future agricultural science teachers for the rigor of teaching special education students in a differentiated classroom.

Quantitative studies that focus on specific aspects of the preservice program should be designed as well. One recommendation for a quantitative study would be to examine the emphasis placed on having and utilizing lab equipment and SAE activities. Another quantitative study needs to be performed in order to explore the engagement strategies that are being used by graduates of the preservice program to help identify what graduates of the program are utilizing and its effectiveness in order to help improve courses that are designed to teach about engagement strategies. Also, this study would help improve professional development workshops hosted by the university that are intended to promote and foster growth among veteran teachers.

Another recommendation for further studies is to determine the effectiveness of faculty utilizing differentiated teaching strategies within their courses. Also, a case study to examine the impact of courses while they are taking place would be an effective way to gauge the experience of students as they are being exposed to the content as a preservice student and make that first year transition less stressful.

The goal of the preservice program ultimately is to give future agricultural science teachers 21st century skills for teacher agricultural science at the secondary level. Another study recommendation, therefore, is to evaluate what is considered best teaching practices in public schools. This study should look at changes or expectations of teachers since 2010 and help the university focus on what skills future teachers are expected to possess when entering the field.

As the literature stated, in teaching teacher initiation has been a “trial by fire” or a “sink or swim” experience. It does not have to be. With some minor changes to the way in which faculty and students begin to use special education terminology and establishing relationships with special education personnel at the student teaching level, these future agricultural science teachers can ease their entry into the profession and feel more comfortable teaching special needs students.

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APPENDIX A

IRB APPROVAL

DIVISION OF RESEARCH Research Compliance and Biosafety

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

DATE:	September 15, 2014
MEMORANDUM	
TO:	Julie Harlin ALRSRCH - Agrilife Research - Ag Leadership, Education & Communication
FROM:	Dr. James Fluckey Chair Institutional Review Board
SUBJECT:	Continuing Review - Approval

Study Number:	IRB2011-0146D
Title:	Differentiated Instruction in the Ag Science Classroom
Review Type:	Expedite
Approval Date:	07/11/2011
Continuing Review Due:	08/01/2015
Expiration Date:	09/01/2015

Comments: Data Analysis Only

APPENDIX B

SAMPLE INVITATION EMAIL TO STUDY

As an ag science teacher with a couple of years under your belt, I need your help. I'm about to begin my research for my dissertation, and you were personally selected by Dr. Harlin as someone who would be an ideal participant for my study.

I'm doing a qualitative study about the preservice aged program at Texas A&M. I'm specifically looking at how it prepared you to teach students with learning disabilities. This is going to be a very open interview where your honesty and incite are going be extremely valuable. As a former ag teacher and a special education teacher, I want to have an open dialogue where I can also answer any questions you might have.

I would like to schedule a one on one interview with you sometime between August 6 and the beginning of school. Your answers will be anonymous, and you can decide the location of the interview and the time.

The purpose of this study is to ultimately help improve the preservice program at Texas A&M, and I am very excited about it. Thank you so much for your time!

APPENDIX C

SAMPLE EMAIL TRANSCRIPT APPROVAL

Michelle Pavelock <mpavelock@ascisd.net> Tue, Oct 9, 2012 at 7:47 AM

To: NAME OMITTED

Thanks! The poor transcriber did that. Ill get it fixed.

On Tuesday, October 9, 2012, HMCCOSLIN wrote:

Looks good... I don't know if you need to fix this but on the first line you spell my name ***.

From: Michelle Pavelock [mpavelock@ascisd.net]

Sent: Monday, October 08, 2012 9:41 AM

To: ****

Subject: approval

Good morning,

It's been a while, but I finally have the transcript from our interview last summer. I know you're very busy, but if you could please take some time and read over it just to make sure that it is accurate to what you were trying to say. Your name will be completely anonymous in any reporting from the interview. You will simply be known as Participant 2.

Thank you so much! Michelle

APPENDIX D

SAMPLE PEER REVIEW MEMO

Dear Dr. Harlin,

I have just completed analyzing my data from my interviews. Three major themes have emerged. First, all four interviewees reported learning more during hands-on experiences. These learning situations included student teaching, observations during methods, and on the job experiences. Second, all interviewees reported learning about special education, which included reading IEPs, implementing modifications, and being a part of the ARD committee, on the job. They did not feel their preservice training was meaningful at all with regards to this. They also all reported learning to differentiate instruction on the job and by working with other teachers. The only strategy they all listed was working with groups and partnering low performing students with high performing students. Third, the preservice program at Texas A&M is not current in how it prepares future ag science teachers and needs updating with special focus on lesson plan preparation, differentiating instruction, and classroom management. Also, special attention needs to be given to current technology like smartboards, paperless teaching, and tablets. Also, how time is used during the preservice program, such as the student teaching block, needs to be adjusted so that student teachers can see the first day of school to meet students and have that experience. The interviewees also felt that their ag science classes were very repetitive.

I am very excited to report my findings to you at this time, and I will begin my writing process tomorrow. I would also like to meet with you sometime next week, if possible, to talk about the current preservice program that is in place.

Sincerely,

Michelle