I, Jennifer Wolfe, hereby submit this original work as part of the requirements for the degree of Doctor of Education in Special Education.

It is entitled:
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Teachers of Students with Autism: Shared Experiences of Professional Development

A dissertation submitted to the Graduate School of the University of Cincinnati in partial fulfillment of the requirements for the degree of Doctor of Philosophy in the Department of Special Education of the College of Education Criminal Justice and Human Services

by

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Abstract

This qualitative study examined the experiences of special education teachers as they strove to improve their practice of teaching students with autism. Each participant had a minimum of one student with autism on their class roster. They were enrolled in a summer intensive workshop designed to educate special education teachers about evidence-based practices found effective with students on the autism spectrum. Following a phenomenological research method, nine special education teachers were recruited and participated in interviews, occurring prior to, during, and after the summer workshop. The findings revealed that special education teachers share the following experiences: (a) lack of pre-service preparation for teaching students with autism; (b) lack of mentoring support during their initial phase as novice teachers; and (c) lack of reciprocating community throughout their careers. The teachers interviewed expressed a desire to provide best practice for their students on the autism spectrum to ensure that they would have the best quality of life possible. Also, the teachers wanted to acquire certain capabilities for improving students’ behaviors and their ability to work independently. Regardless of their pre-service preparation the participants shared similar beliefs, that: (a) on-going quality professional development was necessary to stay current in the field of education for students with autism; and (b) the summer intensive workshop was the means to update their knowledge and skill repertoire which would lead to improved student outcomes.

Keywords: autism, characteristics, evidence-based practice, professional development
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# Table of Contents

Abstract ......................................................................................................................................................... 5  
Chapter 1 ....................................................................................................................................................... 1  
  Introduction ............................................................................................................................................... 1  
  Background ............................................................................................................................................... 1  
  Purpose of the Study .................................................................................................................................... 3  
Chapter 2 ....................................................................................................................................................... 4  
  Review of Literature ................................................................................................................................. 4  
    Introduction ............................................................................................................................................... 4  
    The Autism Spectrum ............................................................................................................................... 5  
    Communication Skills – Theory of Mind ................................................................................................. 7  
    Social Skills - Joint Attention ................................................................................................................... 8  
    Behavioral Skills - Executive Function .................................................................................................... 9  
    Cognition Differences – Central Coherence Theory ............................................................................... 11  
    Evidence Based Practices ...................................................................................................................... 13  
    Research-to-Practice Gap ........................................................................................................................ 18  
    Professional Development ...................................................................................................................... 19  
    Phases of Teacher Learning .................................................................................................................... 21  
    Perspectives on Teacher Learning .......................................................................................................... 23  
    Narrowing the Gap .................................................................................................................................. 24  
Chapter 3 ..................................................................................................................................................... 25  
  Research Methods ................................................................................................................................... 25  
    Phenomenology ....................................................................................................................................... 25  
    Reflexivity ............................................................................................................................................... 27  
    Subjectivity Statement ............................................................................................................................ 27  
    Analysis ................................................................................................................................................... 30  
    Research Context .................................................................................................................................... 31  
Chapter 4 ..................................................................................................................................................... 37  
  Findings .................................................................................................................................................... 37  
    An Individual Experience .......................................................................................................................... 38  
    Grace: Textural Description ..................................................................................................................... 38  
    Grace: Individual Structural Description ................................................................................................ 48  
    Composite Textural Description (All Participants) ................................................................................. 51  
    Introduction ............................................................................................................................................. 51  
    Teacher Preparation ............................................................................................................................... 52  
    Limitations to Professional Development ............................................................................................... 64
Chapter 1

Introduction

Background

Within the field of education there exist two different perspectives on teacher preparation (Brownell, Sindelar, Kiely, & Danielson, 2010). Those aligned with an emphasis on inclusion suggest that categorical distinctions among students with disabilities should receive little emphasis during preservice teacher preparation compared to instruction, as good instruction changes little based solely upon a student’s categorical label. Indeed, this perspective has resulted in many states changing teacher licensure to reflect broader categories for teacher licensure. Others in the field maintain that student characteristics matter a great deal to the kind of instruction students receive. For example, in the state of Ohio, universities are beginning to offer categorically specific certificates (e.g., autism certificates, dyslexia certificates).

Federal mandates under the Individuals with Disabilities Education Improvement Act (IDEA, 2004) required that students with disabilities have access to a general education curriculum that employs teaching strategies supported by empirical evidence. Therefore, all teachers, are required to be knowledgeable about the characteristics of students with disabilities and the evidence-based practices proven most effective to address their needs. This places emphasis on the importance of high quality continuing professional development that focuses both on special education with regard to inclusion, as well as on assessment practices for students with disabilities (Braden, Huai, White, & Elliott, 2005). It is especially important for teachers of children with autism spectrum disorders to have access to current best practices that address their
students’ specific social, behavioral, and communication needs (Simpson, Myles, & LaCava, 2008).

This study investigated how special education teachers of students with autism perceived the effectiveness of their specific preservice training and any post licensure professional development they have received. The study participants were teachers enrolled in a summer intensive program offered by a mid-western university. The focus was on current research methods and theory considered to be the most effective for teaching children with autism. These special education teachers each had a minimum of one student with autism in their special education classes. They generally believed that their participation in the workshop would better equip them to meet the academic and social needs of their students who have autism. Furthermore, the program was designed to support the teachers throughout the following school year by providing a year-long mentor-coaching relationship. The intention was to enhance the delivery of research based techniques into their instruction.

The findings in this research project help to narrow the research-to-practice gap by acknowledging that teachers of students with autism believe that they need more information and skill development relevant to teaching students with autism than was acquired during their initial teacher preparation. During interviews the participants detailed their experiences of teaching without these skills and their search for professional development programs in an effort to attain them. Participants also shared their beliefs as to whether they gained the skills and knowledge they were seeking by attending the above mentioned summer intensive workshop and how this knowledge would enhance their teaching and student outcomes going forward.
Purpose of the Study

The purpose of this study was to explore the phenomenon of the experiences of nine in-service special education teachers with regard to their on-going professional development. The teachers were interviewed as they participated in five days of a summer intensive workshop where they learned scientifically sound instructional strategies for educating students with autism. The guiding questions for this study were: (a) What were the background experiences that these teachers reported about their professional preparation to teach students on the autism spectrum? and, (b) What were the common experiences gained by the participants during a workshop designed specifically to address best practice for teaching students with ASD?

In this qualitative research project, the meaning of the participants’ experiences were explored through the process of phenomenology as described by Seidman (2006), Moustakas (1994), Van Manen (1990), and Husserl (1931). This research offered insight into the shared experiences of special education teachers with regard to their professional development background. It also revealed how these encounters with professional development may have contributed to their motivation to seek to improve their level of expertise for teaching students with Autism Spectrum Disorder (ASD).

The goal of phenomenology is to share essentials of an experience with the reader so that, through their consideration of it, he or she can relate it to their own lived experience (Van Manen, 1990). In this project, in-depth interviews gave voice to special education teachers who served students with autism. It was an opportunity for them to describe the meaning they applied to the learning process, both to their own and to their students.
The second chapter of this study describes both the characteristics of persons with autism as well as how these characteristics influenced school-age students’ social interaction and academic progress. Also, included is a description of the most recent academic research based practices found effective for improving outcomes for students with autism. Chapter 3 first covers the research methodology employed, phenomenology, and then offers a subjectivity statement along with a delineation of methods followed during this research study. Chapter 4 centers on a description of the findings of the participants’ experiences with regard to professional development. This analysis is presented from several perspectives: an individual textural and structural description of one participant’s experience; and a textural and a structural description of all the participants’ combined experiences. The chapter ends with a composite description of the essence of the participants’ shared experiences with professional development. Lastly, Chapter 5 offers a discussion of the findings of this study, and how they compare and contrast with the existing literature on professional development for teachers of children with autism. Also included is a description of the limitations of this study and finally, a review of the implications these results may have on current educational practice as well as upon future research.

Chapter 2

Review of Literature

Introduction

The number of children in the United States diagnosed with autism is estimated to be one in every 110, making autism more prevalent in American children than cancer, diabetes and AIDS altogether (Autism Treatment Network, 2010). The frequency with which children are
born with autism necessarily indicates that the number of students receiving services in the public school system will increase exponentially in the near future. Federal mandates under the Individuals with Disabilities Education Improvement Act (IDEA, 2004) require that students with disabilities have access to the general education curriculum including teaching strategies that are supported by empirical evidence (NCLB, 2002). Educators will be expected to provide best practice interventions and to develop the skills necessary to implement these with fidelity. However, despite the increase in number of students with ASD in school settings, there is a national shortage of qualified special education teachers who have been prepared to meet the specific learning needs of students with autism (Kitmitto, & Rahman, 2011).

In response to the national shortage of special education teachers, many states have developed alternative route programs that lead to licensure of special education teachers that do not include specialized training for teaching students with autism (Boe, Sunderland, & Cook, 2007). Likewise, many four-year teacher training programs offer only a general multi-disability licensure in special education which does not specifically address the academic needs of children with autism (Mainzer & Horvath, 2001). Training and preparation strongly influence teachers’ attitudes toward the success of students with disabilities (Destefano, Shriner, & Lloyd, 2001). However, research has consistently reported that teachers believe they have not been adequately prepared to teach students with disabilities (Burke & Sutherland, 2004) and need additional professional development to adapt curriculum, materials, and instructional strategies to meet the varied needs of their students (Kamens, Loprete, & Slostad, 2000).

**The Autism Spectrum**
Autism is defined under IDEA (2004) as a developmental disability that often presents prior to age 3 and affects verbal and nonverbal communication as well as social interaction, all of which have an adverse affect on the child's academic achievement. Additional characteristics as described in The Diagnostic and Statistical Manual of Mental Disorders, 4th ed., text revision (DSM-IV-TR) of the American Psychiatric Association (APA) are stereotypical movements, resistance to change, and difficulty processing sensory input (DSM-IV-TR, 2000). The unique characteristics of students with autism require that teachers have the knowledge and skill to implement evidence-based instructional strategies to successfully address them. There exists a growing body of research to support effective instructional techniques for teaching students with autism (see National Research Council, 2001). Yet, most teachers are either unaware of them and/or do not have the expertise to implement them effectively (National Research Council, 2001), therefore, creating a research to practice gap.

Kanner identified three characteristics of autism commonly referred to as the triad of impairments (Wing, 1991). These characteristics manifest as deficits in the areas of: communication, social interaction, and behavior (DSM-IV-TR, 2000). However, because these characteristics fall on a continuum of varied intensity it is impractical to devise a standard definition or a standard protocol for interventions (Simpson, 2005).

Educators need training to understand how these characteristics influence the learning process for students with autism and how to design effective interventions. They also need knowledge of the theories that are widely used to explain the underlying causes of the characteristics that children with autism typically display (Aspy & Grossman, 2008). These theories are: theory of mind, joint attention, theory of executive function, and central coherence.
theory. In the following, each theory will be described within the context of each characteristic of the triad.

**Communication Skills – Theory of Mind**

Students on the autism spectrum usually have differences in communication and language that range in severity from non-verbal to hyperlexia, i.e. displaying an extensive vocabulary (Paul, 2005). Communication and language impairments are likely due to atypical development in the central nervous system that leads invariably to impaired social-communication development (Volkmar, Klin, Schultz, Rubin & Bronen, 2000). Communication, however, includes more than the ability to speak and understand language but also the ability to convey and decipher messages relayed through voice intonation, non-verbal gestures, eye gazes, facial expressions and body language skills which are typically impaired in children with autism (Paul, 2005). Communication difficulties often experienced by children with autism can be better understood by applying the theory of mind (Baron-Cohen, Tager-Flusber & Cohen, 2005).

Theory of mind refers to a person’s ability to consider life experiences from the perspective of another, and through a capacity of empathy, to anticipate the thoughts and feelings of others, and to use these inferences to explain behavior and to plan a course of action according to how they interpret the needs of others (Baron-Cohen, Leslie, & Frith, 1985). Theory of mind manifests during child development as the capacity to reflect upon one’s own actions in relation to the actions of others (Frith, 2003). Neurological differences in children with autism, however, may impede theory of mind development and the ability to understand the difference between real and imaginary events as well as the ability to understand the intended meaning of others
(Frith, 1991). Theory of mind deficits are likely to compound and extend impaired social interaction (Barnhill, 2001a; Baron-Cohen, et al., 2005).

Social skills development of children with autism may also be impaired due to deficits in conversational skills such as speech impairments, pronoun misusage, restricted vocabulary usage, and the inability to understand figurative language such as sarcasm, idioms, or colloquialisms (DSM-IV-TR, 2000). Additional conversation difficulties such as failure to engage or maintain a conversation or the tendency to limit conversation topics to their own interests, use of repetitive and inappropriate expressions, or monotone speech might be misinterpreted by communication partners as a lack of interest in engagement (Cashin, 2005; Happe, 1996). Communication impairments are one of the three characteristics of autism spectrum disorder and directly influence the remaining characteristic of autism, namely social skills.

**Social Skills - Joint Attention**

Atypical social skills of children with autism are influenced by deficits in joint attention. Joint attention refers to the development and ability of children to initiate and share visual experience with another person. This necessitates pointing to what they intend to share and making eye contact with their social partner (Mundy 1995). Deficits in joint attention typically manifest as an inability to engage in or attend to a shared experience with another (Stichter, Randolph, Gage, & Schmidt, 2007). Social skills are applied during shared experiences where a child’s behavior is judged and feedback is given from others in the form of perceivable reactions. In these instances typically, developing children are provided the opportunity to practice and refine their behavior through this process of trial and error. Children with autism are likely not to
attend to or recognize social feedback and therefore, they cannot gauge the appropriateness of their behavior based on this feedback. The inability to refine their behavior based on social responses restricts their social development (Stichter et al., 2007).

Unlike most children with ASD, children with Asperger’s or high functioning autism, have the desire to socialize and make friends with others; however, like other children across the autism spectrum, impaired social skills may isolate them from their peers (Myles & Simpson, 1998). They may come across as socially insensitive or rude because of their lack of subtlety and their disregard for personal space which in turn may limit their ability to form and maintain friendships (Barnhill, 2001a; Ozonoff, Rogers, & Pennington, 1991). Notably, these circumstances may worsen during adolescence leading to increased social anxiety, isolation, and depression (Barnhill, 2001a).

**Behavioral Skills - Executive Function**

Behavior is the third category in the triad of characteristics of autism and many of the behavioral characteristics of autism can be explained by the theory of executive function (Pennington & Ozonoff, 1996). Executive function involves one’s ability to organize their thoughts, to think in terms of the future, to set goals and to plan the steps that seem logical for meeting those goals (Duncan, 2001). It also influences one’s ability to be flexible in thinking, to accept and make necessary changes in daily life and to self-monitor thoughts and reactions to unexpected events (Baddeley, 1986). Deficits in executive function can manifest in a variety behaviors that are considered typical characteristics of autism (DSM-IV-TR, 2000).

For example, students with autism often display a range of restricted interests and repetitive behaviors which stem from a strong need for sameness or routine due to deficits in
executive function (American Psychiatric Association, 2000). This may cause a preference for order which can be ritualistic at times leading to difficulty in coping with unexpected change. Interference with the routine can quickly lead to anxiety, frustration, or anger. Many routines are non-functional such as eating the same foods every day at lunch while some rituals by their very nature, may be considered socially unusual such as or removing all clothing before toileting (Atwood, 2007).

Although the demonstration of repetitive thoughts or behaviors is similar to the characteristics of Obsessive Compulsive Disorder (OCD) and although it is possible for a person with ASD to also have OCD, they are not the same disorder. Repetitive behaviors exhibited by individuals who have OCD are the result of anxiety, such as a fear of germs that leads to excessive hand washing (Mesibov, Shea, & Adams, 2001). People with ASD express similarly obsessive thoughts and preoccupations especially with their preferred topics of interest, but unlike people with OCD, their perseveration can actually serve as a coping mechanism to decrease their anxiety (Barnhill, 2001b; Mesibov et al., 2001; Leaf & McEachin, 1999).

Research shows that children with autism often engage in activities of self-stimulation when they are feeling anxious or bored (Leaf & McEachin, 1999). Typical activities involve bodily movements such as arm flapping, pacing, jumping, or repeatedly making faces (Leaf & McEachin, 1999). They may also repeat a sound, word, or they may perseverate on reciting dialogue from a movie or television commercial they have seen regardless of the appropriateness for the immediate situation. They may repeat or recall information, such as recipes, dates of favorite movie releases, or details about their favorite toys regardless of the attention or interest of a listener (Fouse & Wheeler, 1997).
Children with autism may also have a strong preoccupation with specific topics of their own personal interest (DSM-IV-TR, 2000). Although similar to the interests and hobbies of typically developing children, the difference lies in the degree of their interest which may be so intense as to impair their social development or academic achievement. Topics may also be either developmentally inappropriate, such as a teenager who is a fan of a television program targeted for pre-school age children, or atypical and unusual, such as an obsession with elevators or locks (Atwood, 2007). If the topics are perceived as unusual by peers (Clements, 2005) the child may be ostracized as a result.

Baron-Cohen and Wheelwright (1999) noted that one of the common characteristics of special interests of children with autism is that the topics are relative to the children’s physical world and not their personal or social world. Adults with Asperger’s syndrome have reported that the physical world is usually more predictable than the social aspects of their lives. Unpredictable events cause anxiety while predictability is more comforting and preferred (Grandin, 1995). This helps to explain why special interests often include information that is predictable such as repetitive monologues and why children with autism gravitate toward academic subjects that are based on verifiable facts and patterns such as science, history, and math (Attwood, 2007).

**Cognition Differences – Central Coherence Theory**

Cognitive differences have been observed and documented in children with autism (Frith et al., 1991). There is substantial research to support the hypothesis that these differences can be explained by the theory of central coherence (Happe & Frith, 2006). Central coherence is a person’s ability to process information by combining the details of an experience in order to
derive the general meaning from that experience (Frith, 2003). Students with autism are likely to focus on specific details and are unable to understand how these details relate to each other to form an overall understanding of an experience (Happe & Frith, 2006). Most people process information in a top-down style by first forming and understanding the general meaning of a particular experience, focusing on details later. However, individuals with autism tend to process information in a bottom-up style, focusing their attention on the details, not understanding how they are connected and therefore, making it difficult to see the “big picture” (Happe & Frith, 2006, p. 6). This is referred to as weak central coherence (WCC), which is the tendency to process information in pieces, unable to combine the details for comprehension of the whole idea. WCC further complicates the ability that a student with autism has to understand abstract language such as metaphors, similes, irony, and parables (Happe & Frith, 2006). WCC may explain why a child with autism has difficulty with creative thinking and creative writing.

In addition to the typical triad of characteristics (Wing, 1991) previously described, many children with autism experience deficits in sensory processing, motor functioning, and difficulty with auditory processing of information (Mesibov, Shea, & Schopler, 2005). Classroom noise combined with the auditory instruction style of most teachers, make it likely that students with autism will filter out some distraction and therefore receive only partial instruction (Burke & Sutherland, 2004). This might lead most students on the autism spectrum to experience both academic and social difficulties in the typical classroom environment (Frith, 1991) unless the typical environment is modified to accommodate the student with autism. Consequently, teachers must be provided with training on current research based instructional practices in order to make the general education curriculum accessible to all students including children with autism (IDEA, 2004).
Evidence Based Practices

Decades after Kanner (1943) first identified ASD, research progress in the field of the education of students with autism remained slow until Lovaas (1987) began to publish information on Applied Behavioral Analysis (ABA). This formed a highly structured behavior management program and process of instruction that included discrete presentation of information by the instructor, immediate feedback to the student upon their response, and an intense schedule of reinforcement as well as an ongoing data collection process (Schoen, 2003). Lovaas’ (1987) research that showed evidence that ABA was effective with children across the autism spectrum. Since Lovaas’ (1987) research, autism has become one of the most researched disabilities in the field of special education.

Current research has improved practitioner knowledge with regard to both the general characteristics of children with autism and best practice for improving their quality of life (Simpson, Myles, & LaCava, 2008). More specifically, education research that is scientifically proven effective for students with autism has been compiled into comprehensive reports by three prominent agencies such as: The National Professional Development Center (NPDC); The National Research Council, (NRC); and, The National Autism Center, (NAC). Each of these agencies conducted extensive reviews of the existing research on interventions scientifically found to be effective for students with autism. Each has published a report of their conclusions and findings which serve as resource for practitioners in the field of autism. (see figure 1.)

National Professional Development Center (NPDC). The mission of the National Professional Development Center on Autism Spectrum Disorders is to promote the use of evidence-based practice for children with autism. The Center works in coordination with each
state’s Department of Education, to provide professional development to those professionals who work with children on the autism spectrum. The NPDC identified 24 evidence-based practices in their report National Professional Development Center (2008) that have been proven effective when used with children on the autism spectrum.

**The National Autism Center (NAC).** The National Autism Center’s mission is to promote the implementation of evidence based practices for children with autism to improve all areas of their lives. In 2009, the NAC completed the National Standards Project, a comprehensive report for the purpose of establishing a set of standards that address the basic symptoms of ASD. It serves as a reference for parents and professionals who set goals and make treatment plans for children with autism.

**The National Research Council (NRC).** The report prepared by the National Research Council (2010) did not delineate specific treatments for children with autism in a similar way as the reports published by the NAC and the NPDC. Instead, the NRC reported a set of 4 standards for the purpose of recommending standards to ensure that each child with autism should have treatments tailored to their specific academic, social and behavioral needs. The NRC’s recommendations include: (a) early intervention for children immediately upon a diagnosis of autism including year round programming; (b) full time intensive instruction; (c) placement in a class with a low student to teacher ratio and no more than two children with autism; and (d) all instruction of individual goals should occur in either small group or a 1:1 teacher student ratio.

**Overlap of Treatments.** Both the National Professional Development Center (NPDC) and The National Autism Center (NAC) presented their reviews of the literature in delineated reports of evidence-based practices found successful for individuals with autism spectrum
disorders. In many ways the two reports were similar, given the rigorous criteria used for selecting which treatments would be included in their reports. The two reports, in comparison, identified 9 overlapping empirically based treatments (see figure 1.) A brief description of each of these 9 treatments is as follows:

1. **Antecedent package interventions** are designed to alter either the environment or events that have been observed to occur preceding a target behavior by a student. Modifications are made to the environment before the child enters with the goal to increase student success and decrease problem behaviors. Examples of antecedent treatments found effective with students with autism include: teacher presence, prompting by the teacher, seating, familiarity with class routine, incorporating the student’s special interest into lessons, thematic activities and priming. Priming is an evidence based teaching strategy in which the child is exposed to an upcoming activity to help prepare them for their successful participation (Dunn, 2008).

2. **Behavioral Package interventions** begin with an observation of events that occur in the environment prior to and after the child exhibits a targeted behavior. Data are collected and considered for the purpose of modifying the environment to maximize the student’s success. Examples of behaviors targeted during Behavioral Package treatments might include: speech goals on the IEP, homework incompletion or disruptive behaviors. Treatments include antecedents such as: reinforcement, contingency management, schedules and verbal redirection as well as consequences that are reinforced or removed as needed to improve student outcomes.

3. **Modeling Intervention** involves demonstration of a target behavior by either an adult or a peer with the goal that the student observer will imitate the behavior. This
intervention might be provided by several methods including live demonstration or video modeling. When target behaviors are video recorded, the student may act as the model and may view this example repeatedly. Numerous studies have found video modeling effective in teaching social and functional life skills (Ayers & Langone, 2008).

4. **Naturalistic Teaching Strategies** focus on teaching functional skills in the natural environment. Students with autism tend to have difficulty generalizing skills learned from one environment to another. For example, students with autism may be able to tell time by reading an analog clock face in a workbook in math class, but cannot duplicate the skill when looking at an analog clock in other settings. Naturalistic Teaching Strategies include the principle of natural consequences to motivate students to learn functional skills that are important to him or her. A student may want to watch a favorite program on television at a specific time which would serve as a motivator to apply their skill to reading an analog clock near the television. Successful completion of this assignment would result in the natural consequence of watching the program.

5. **Peer Training** involves social interaction with children who do not have disabilities with the intention to support their development of appropriate social interaction skills. Typical peers are taught strategies for social interactions with children who have autism such as how to get their attention, initiate sharing activities for increased joint attention ability, model appropriate play skills, and organize play activities for improved executive function ability.
6. Pivotal Response Treatment (PRT) is similar in methodology to Naturalistic Teaching strategies (NTS) because during both methods skills are taught in the natural environment such as in the home or classroom where the targeted or pivotal behaviors usually occur. Pivotal behaviors are considered to be basic behaviors such as self-initiation and self-management that are likely to influence the development of additional skills such as social interaction (i.e., communication and play).

7. Schedules provide predictability for children with autism and reinforce organization while encouraging greater independence. Schedules may range in detail from the bell schedule for an entire school day, to activities that will occur during one class period, to the steps required to complete one assignment. Schedules may include either words or pictures or both to accommodate the student’s reading ability. Schedules also serve to prompt the student through the stages of a specific time period or situation.

8. Self-management Treatment includes instructing students in self-regulation of a targeted behavior and providing reinforcement when they do so. Children with autism may not pick up on subtle environmental cues when a change in their behavior would be more socially acceptable. Self-management treatments assist students in the identification of specific behaviors for increased independence and social acceptance. Students are encouraged to participate in setting behavior goals and choosing reinforce such as visual prompts and tokens.

9. Story-based Intervention Package targets specific behaviors in a written story form. Individual stories are written that can be read to and by the student repeatedly in order to improve the student’s awareness of the behavior and of appropriate alternatives.
These scientifically sound educational recommendations and treatments may serve as resources to all teachers of students with autism. This could be an especially important resource for teachers who believe that they currently have an inadequate degree of knowledge of best practice for teaching children with autism. These resources are a compilation of widely accepted protocols that have led to improved outcomes for children across the spectrum (National Autism Center, 2009).

**Research-to-Practice Gap**

Special education research has produced a body of EBP that are effective to improve learning outcomes for children with special needs. Many of these practices have also been proven to be effective to meet the specific communication, social, and behavioral outcomes for children with autism. However, there exists a research-to-practice gap in many classrooms where students with autism are enrolled because many teachers do not regularly implement EBP into their instruction (Carnine, 1997). When they do attempt to include scientifically proven strategies, they rarely have the skill to follow the implementation procedures correctly (Stahmer, Collings, & Palinkas, 2005). Instead, many teachers implement a variety of strategies that have not been proven effective for use with children on the spectrum (Morrier, Hess, Heflin, Juane, Morrier, Hess, & Juane, 2011).

McLeskey and Waldron (2004) explored the reason for this gap between teachers’ knowledge of EBP and the actual implementation of new this new knowledge into their practice. They found that the artificial contexts of most learning environments are likely to influence the lack of implementation by teachers when they return to their classrooms. Traditionally, in-service professional development programming, as well as special education teacher preparation programs, seldom provide learning opportunities within the natural context of the classroom.
leaving teachers unable to revise their instruction to include current research based practices (Feiman-Nemser, 2001).

**Professional Development**

Professional development is generally considered an essential component toward improvement in effective classrooms and narrowing the research-to-practice gap. Guskey (2002) defines the purpose of professional development as, "to make a difference in teaching, to help educators reach high standards, and ultimately to have a positive impact on students" (p. 12). Although many teachers have participated in professional development programs either because their school and/or district required it and/or to renew certifications and licenses, for the most part teachers have participated because they want to improve their practice. They see professional development as the easiest and most effective means for doing so (Fullan, 1993).

**Perspectives on Professional Development.** Cochran-Smith and Lytle (1999) identified three different perspectives of teacher learning with regard to professional development and these are: (a) knowledge-for-practice; (b) knowledge-of-practice; and (c) knowledge-in-practice. Each perspective represents a different way of presenting information based on the varied needs of those participating in professional development and differing goals and desired outcomes they have. They provide a framework for better understanding participant learning according to the varied information delivery approaches employed during professional development programs.

The first approach to professional development is knowledge-for-practice. It is based on the premise that the more knowledge that teachers acquire on a subject, the more effective their instruction will be (Desimone, Smith, & Ueno, 2006). Knowledge-for-practice characterizes the teacher as one who accepts new information, and then adapts their instruction methods
accordingly. This perspective is most often the basis for professional development that is delivered at one time meetings, using a lecture style dissemination of information. The knowledge-for-practice approach alone has not been proven effective for improving teacher learning and student outcomes since, as a matter of course, teachers tend not to follow through and implement practices which are presented this way (McLeskey & Waldron, 2002a). This is due, in part to the influence of teachers’ prior beliefs and experiences and on their value of the new information (Sprinthall, Reiman, & Thies-Sprinthall, 1996).

The second approach to professional development is knowledge-in-practice. The knowledge-in-practice approach to teacher learning assumes that the knowledge teachers need to know is not learned through formal instruction, but is naturally acquired through experience. It is acquired through the process of self-reflection gained through membership in a professional community of colleagues who over time share classroom experiences and discuss student cases (Cochran-Smith & Lytle, 1999). Professional development from a knowledge-in-practice perspective might include didactic experiences between an expert and a novice teacher, and group discussions in order to share experiences, reflect and problem solve. The knowledge-in-practice approach takes into account the necessity for teachers to reflect on their practice and then carefully consider new information through the lens of their own beliefs and prior knowledge (Cochran-Smith & Lytle, 1999).

The third approach to professional development is knowledge-of-practice. The purpose of the knowledge-of-practice approach is to prompt school reform through a process of a reflection based program design. Teachers are challenged to study their own practice and to identify any assumptions that they may make or concerns which they may have, including not only their own strategies but also their schools’ for meeting students’ needs. This inquiry occurs within a
professional community that includes other teachers, administrators and educational researchers in an environment of reciprocal learning (McLeskey & Waldron, 2004).

Due to these findings, teacher learning and professional development prototypes are moving toward a constructivist model where teachers reflect on practice and discuss issues with other teachers as a means of adding or constructing knowledge (McLeskey & Waldron, 2004). Teacher learning or construction of knowledge occurs over time on a continuum influenced by their years of experience and participation in on-going professional development (Feinman-Hemer, 2001).

**Phases of Teacher Learning**

Feinman-Hemer (2001) described a learning continuum that serves as a framework for professional development. The continuum includes three phases of teacher learning: (a) initial teacher preparation; (b) new teacher induction; and (c) continuous or on-going professional development. Each phase has a different focus and agenda to address the different professional development needs of teachers as they progress along the continuum.

**Initial Phase of Teacher Preparation.** The preservice preparation of qualified teachers is one of the most important challenges in the field of ASD (Simpson, 2005). In a survey by Morrier and colleagues (2011) fewer than 20% of teachers surveyed, who taught students with autism, reported that they learned to implement EBP during their teacher preparation programs. Outside of their teacher training programs they found that professional development opportunities specific to ASD were scarce and often failed to address the importance implementing evidence based practices (Scheuermann, Webber, Boutot, & Goodwin, 2003).
**Induction Phase.** This second phase includes novice teachers in their first few years of teaching. This phase has a strong influence on the quality of their future teaching careers and whether they remain in the teaching field over time (Busch, 1984). In this phase teachers are vulnerable because teaching requires crucial coping skills that they have not yet developed. As they transition from pre-service to in-service new teachers must shift from thinking about future practice to daily demands of the classroom. They must focus on two distinctive aspects of this phase: teaching and learning to teach (Feiman-Nemser, 2001).

Professional development during the induction phase of teaching is either provided by employers or sought out by teachers on their own. Typically such programming involves the teachers’ participation in one day or half-day programs where outside experts lecture about current techniques for teaching students with ASD. In such programs teachers are likely to have little to no input on the information presented, and minimal interaction with the instructors. Teachers may enroll in university offered courses in order to improve their practice but the information covered may not necessarily connect to their classroom practice. The didactic presentation of these workshops outside of the natural environment of the classroom leads to teacher difficulty in understanding how the information improves their teaching and their students’ outcomes. Therefore, it is unlikely that the teacher will implement these practices or that the professional development will affect significant changes (Feiman-Nemser, 2001).

**Continuing Professional Development.** This third and final phase includes those teachers who have progressed through the transition from novice to experienced teacher. Teachers in this phase may use their experience and ongoing learning to serve as mentors to less experienced teachers. In this phase, ongoing professional development is required for maintenance of teacher knowledge and development of new skills (Feiman-Nemser, 2001).
Literature shows that regardless of a teacher’s position on the learning continuum those who stay current in special education research by participating in professional development have more content knowledge, and are more willing to implement new teaching methods in their classrooms (Desimone, 2011).

**Perspectives on Teacher Learning**

Just as teacher learning occurs on a continuum of knowledge and experience (Feiman-Nemser, 2001), teacher learning is influenced by the quality of the programming in which they participate (see Spodek, 1996; Desimone, 2011). Bush’s (1984) seminal research on varied approaches to professional development provides insight for current program design. Bush examined the influence that different professional development approaches had on teacher ability to implement new skills learned. The results showed that when the professional development approach included only a description of the new skill, 10% of teachers used that new skill in their classroom. When modeling of the new skill along with practice and feedback, were added to the training, implementation increased another 2-3%. Finally, when coaching was added, an average of 95% of the teachers involved implemented the new skill into their practice.

Similarly, Landry, Anthony, Swank, and Monseque-Bailey (2009) compared the components of various professional development programs considered to be the most effective in changing teacher practice. Four similarities among the professional development programs were identified: (a) the teachers’ participation in a year-long course that emphasized opportunities for teachers to practice what they were learning in their classrooms; (b) weekly classroom mentoring and immediate feedback as well as progress monitoring on children’s academic progress; and (c)
teacher participation in small group learning, and (d) regular on-line discussions with other teachers who were enrolled in the same professional development program.

The above mentioned research supports the effectiveness of professional development programming that follows a knowledge-of-practice approach to information delivery using a reflective approach. The summer intensive program which participants of this research project attended, framed learning experiences in a knowledge-of-practice approach. Participants were encouraged to reflect on their current practice, compare it the new knowledge they had gained and consider how they might alter their practice to implement. The workshop itself provided participants with a professional community where they could discuss and exchange ideas and thereby learn from one another (McLeskey & Waldron, 2004).

The varied scientific based practices that participants experienced during the workshop were: (a) didactic presentation of information (Desimone, 2011; Spodek, 1996); (b) descriptions of a new skill in conjunction with expert modeling (Lavie & Sturmey, 2002); (c) practice of the new skill in the participant’s classroom (Lavie & Sturmey, 2002) (d) with coaching and feedback by workshop leaders (Bush, 1984); (e) teacher participation in small group learning (Landry et al., 2009); and (d) regular on-line discussions with other participants and workshop leaders (Landry et al., 2009): e) all of which entailed sustained learning spread over a minimum of three weeks and exceeding 20 hours (Desimone, 2011).

Narrowing the Gap

The field of autism has a plethora of research on best practice for teachers to better meet the instructional and behavioral goals of all students and especially those with autism (National Research Council, 2001). But, little has been reported on the degree with which teachers have knowledge of these
treatments and have implemented into their professional practice. Likewise, little is known about the value that teachers place on any training they received based on their ability to implement the treatments and student outcomes as a result. The purpose of this research study was to identify the beliefs and experiences of nine of the participants to understand their experiences with preservice training and ongoing professional development. Better understanding their experiences may afford ways for researchers and professional developers to lessen the research-to-practice gap in the classrooms where children with autism are being taught.

Chapter 3

Research Methods

Storytelling is a method for people to share their experiences with one another and in the process make meaning from those experiences for themselves (Seidman, 2006). The manner in which people behave as they share a common experience becomes more understandable when placed within the context of their lives. This context provides the framework for the meaning they give to the particular experience being studied (Seidman, 2006).

In storytelling, people choose details from their thoughts and symbolize them as language so that others might better understand their experience and their behavior (Heron, 1981). Education, as social interaction, can best be understood through the stories told by those who are most involved (Ferrarotti, 1981). Very little education research has included this perspective (Seidman, 2006).

Phenomenology
One avenue for storytelling and meaning-making is the interview process (Seidman, 2006). The motivation behind using interviews, as a method of research, is a desire to understand the experiences of others and how those experiences might inform their behavior (Van Manen, 1990). In this project the meaning of the participants’ experiences are explored through the process of phenomenology as described by Seidman (2006), Moustakas (1994), Van Manen (1990), and Husserl (1931).

Seidman’s (2006) qualitative research design of phenomenological study was employed for this research project. It is a rigorous process which typically includes a series of three sequential interviews in order to texturalize or put into words, the lived experience of each participant (Seidman, 2006; Van Manen, 1990). Each set of interview questions aims to elicit information from the participants as they describe his or her life’s context. And, in the process, their description sheds light on the meaning derived from their individual experiences (Seidman, 2006).

The purpose of the first interview was to learn about the participants’ childhood and any previous life encounters they might have had with people with autism. The second interview was designed to encourage the participants to describe their current teaching experiences with children with autism and relevant training they’ve had prior to the workshop including factual details about planning and implementing evidence-based interventions specifically designed for students with autism. The purpose of the third interview design was to elicit responses that describe the participants’ experiences with various components of the workshop as each relates to the context of their current and future teaching. In particular, the emphasis was placed on how
this experience might have affected their instructional strategies when applied to teaching students with autism (Seidman, 2006).

The interview texts are then categorized into common themes and described in rich detail. These descriptions, referred to as textural descriptions, are then analyzed to identify possible underlying meanings the participants’ have acquired that may have influenced their perspective of the topic. The underlying meanings that emerge from the data are reported and referred to as the structural descriptions of each participant. The data meaning is further reduced to reveal the common experience or core essence as it was shared by all participants (Moustakas, 1994).

**Reflexivity**

In any qualitative study, it is not possible for the researcher to remain completely separate and objective about the phenomenon being studied. However, by being reflexive the researcher is able to monitor her biases and emotional responses by identifying or bracketing them to reduce her personal influence during analysis (Hatch, 2002). Reflexivity also guides the researcher toward the primary goal of phenomenological research which is to reflect on the stories shared by the participants and in so doing recognize the common meanings among them as compared to the similarities in her own experiences. It is out of this kind of comparative experiential analysis that a universal meaning, which connects to the shared experience, may be revealed (Van Manen, 1990).

**Subjectivity Statement**

Specific to phenomenology is a process of reflection called epoche in which the researcher journals to elicit an awareness of any bias, prejudice, or assumptions held in relation
to the topic being studied. Epoche is applied so that these beliefs might be set aside and by doing so minimize their influence on the analysis process (Moustakas, 1994). During analysis, I remained aware that my observations of the participants’ experiences could not help but be influenced by my 25 years of teaching in the special education field. I sought to explore and identify my own assumptions about teaching students with autism as well as to examine my feelings of respect for those participants who had considerably more knowledge and experience than I in teaching students with ASD. I also felt empathy toward those participants who were new to the field and feeling insecure about their upcoming first year of teaching students with autism. During analysis, when my own biases became apparent, I noted these feelings in the margins, a process of bracketing, to provide a reminder of their possible influence on my analysis.

My journey to becoming a teacher started at about eight years old, when I got my own bedroom and no longer had to share with my older sister. I decorated my room in the style of an elementary school classroom. I had a large teacher’s desk, a chalk board easel, graded papers displayed on the wall and a row of students, my dolls, seated facing the chalk board.

When I was in high school I decided to attend college and to major in education. I first became interested in teaching children who have hearing impairments when I was 16 years old. I attended a summer camp where I met three campers who were deaf. They used American Sign Language (ASL) to communicate. There were two interpreters who stayed at the camp as well and interpreted for them. I was fascinated by watching them use sign language and decided that I wanted to learn. They taught me the alphabet and some basic sign language. Months later I
enrolled in sign language classes at night and continued to study throughout my high school years.

In 1984, I graduated from college with a bachelor’s degree in deaf education and started my first year teaching students with hearing impairments in a public elementary school resource room. I remember feeling under prepared to teach the five children in my class. My teacher preparation program had been a combination of elementary education methods courses and a series of courses in speech and ASL. I was very skilled in sign language, but felt frustrated with my lack of knowledge about how to address the reading and language delays of my students. I felt very isolated because I had no one to collaborate with or to mentor me and no avenue to expand my learning. I resorted to teaching my students similarly to the way I was taught as a child, except I used sign language.

My second year of teaching, I accepted a position at the Kentucky School for the Deaf. I was hired to work in the high school English department on a team with four other English teachers. In this environment, I learned a great deal about how to teach reading and language to students with hearing impairments. I had a community of teachers who mentored and collaborated with me. In this setting I formed the belief that a specialty school environment was more conducive for developing teacher expertise than an inclusive environment and therefore a better learning environment for students with specific special needs.

During the following years I moved and lived in several different states and had the opportunity to teach in a variety of settings including both resource room and itinerate positions. I enjoyed these experiences but felt frustrated by some general educators’ prejudices toward having children with disabilities in their classes and by many teachers’ lack of skill or interest in
Years later during the process of writing my dissertation, and while I collected and analyzed the data, I often related to the frustration that the participants expressed during their interviews. They each mentioned feeling inadequately prepared to teach students with autism. Some participants also experienced a resistance to inclusion from the general education teachers that they worked with. This was a familiar experience for me due to my first years in deaf education. I had to address these feelings and stay in the data to reflect the thoughts of the participants, and to make every effort to prevent my own feelings from influencing the decisions I made with regard to my data analysis.

Analysis

Methods and procedures of phenomenological analysis were employed as described by Moustakas (1994). Analysis began with open coding of the interview data and a process of reduction and elimination (Moustakas, 1994). All interview transcriptions were re-read to gain a sense of the data as a whole at which time possible themes were noted in the margins (Moustakas, 1994). While reading, I highlighted every statement that seemed relevant to the teacher’s experience with the workshop. These statements are referred by Moustakas (1994) as horizons. I reviewed my list of horizons through a process of reduction in which each was considered in relation to all the others and eliminated if its meaning was repetitive, overlapping, or irrelevant to understanding the experience of the teachers. Participant statements must meet two requirements to be considered relevant to the study. They must “contain a moment of the experience,” (Moustakas, 1994, p. 121) and they must be stated clearly so that they may be
labeled as a horizon of the experience under study. The data that meets these qualifications are categorized into horizons of the experience (Moustakas, 1994). The horizons that remained were clustered thematically and considered to be the core themes of the participants’ experience (Moustakas, 1994).

The horizons were placed into a matrix including participant responses organized accordingly (see appendix). The data from the matrix was then written as descriptive summaries which were referred to by Moustakas (1994) as textural descriptions. They represent the subjective experiences as reported by the participants and presented from two perspectives: the individual account of each participant regarding their experience and the composite of combined common experiences of all participants that represents the homogeneity of the collected data.

The interpretative process of the analysis is referred to by Moustakas (1994) as imaginative variation. The process of imaginative variation requires the researcher to reflect on the textural descriptions of the participants with the intent of identifying underlying influences that might explain their feelings and thoughts in relation to the topic. I imagined possible structures that might have influenced the accounts given by the participants and reported them as structural descriptions. These structural descriptions are also presented from two perspectives: that of each participant individually and that of the participants’ combined experience (Moustakas, 1994). Then a description is written to describe the individual underlying meaning or essence of the experience for each participant. Then, the data were described to reveal the core essence of the lived experience of the phenomenon as it was shared by all participants.

**Research Context**
This study was conducted with individuals currently employed as teachers of students with autism. They participated in a summer intensive workshop where they received instruction on how to implement evidence-based instructional practices for teaching children who have autism. The workshop lasted a total of five days and was the first component of a course offered by an urban university as part of a graduate program in special education. During the following school year each teacher was assigned to read a required list of current research with regard to scientifically based practices found successful at improving behavioral and academic outcomes of students with autism. In addition to the reading, each teacher was observed four times in their classrooms by one of the course instructors. The teachers also attended four additional meetings at the university to view video taken of their instruction, discuss their classroom experiences and to receive coaching and further instruction on implementing evidence-based practices with their students who have autism.

The instructional goals listed on the course syllabus were:

- Describe the characteristics of autism and the implications of the characteristics on learning and engagement.
- Implement and report individualized informal assessment and instructional implications.
- Describe, implement and collect data on the components of effective teaching including
  - Assessment
  - Structured teaching
  - Instructional strategies
- Functional behavior assessment and designing positive behavior support plans
- Integrating related services (OT/PT/Speech) into the classroom curriculum
- Teaching for generalization of learned skills
- Communication systems and imbedding into teaching curriculum
- Development of social and leisure skills
- Developing independent work skills.

**Participants.** Participant selection consisted of a sample of special education teachers who met several criteria. They were all currently enrolled in the summer intensive workshop and they were each currently employed as special education teachers with at least one student with autism on their class roster. There was one exception. One participant was currently staying home with her three year old daughter, but had three years recent experience teaching students with autism in a self-contained setting. In addition to the similarities that brought the participants together, they had varied training and teaching experiences (see Table 1). The participants were all white females ranging in age from 22 – 47 years and ranged in total years of special education teaching experience from 0 - 11 years of experience. All of the participants graduated from their teacher preparation programs with no formal training for teaching students with autism. However, while four of the participants had no experiences with children with autism, five participants had some degree of post licensure training for teaching students with autism such as: working in summer programs, working as an educational aid, feedback from consultants in their classes.
### Participant Information

<table>
<thead>
<tr>
<th>Participant Teacher Pseudonym</th>
<th>Age</th>
<th>Race and Gender</th>
<th>Total Years of Teaching Experience</th>
<th>Total Years of Teaching Students With ASD</th>
<th>Classroom Setting</th>
<th>Number of Students Served with Autism</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alicia</td>
<td>47</td>
<td>White Female</td>
<td>11</td>
<td>11</td>
<td>High School Multi-disability resource room</td>
<td>1</td>
</tr>
<tr>
<td>Ellen</td>
<td>43</td>
<td>White Female</td>
<td>11</td>
<td>11</td>
<td>Elementary, Moderate to severe, self-contained class</td>
<td>2</td>
</tr>
<tr>
<td>Amber</td>
<td>38</td>
<td>White Female</td>
<td>11</td>
<td>11</td>
<td>Elementary, Moderate to severe, self-contained class</td>
<td>6</td>
</tr>
<tr>
<td>Carly</td>
<td>37</td>
<td>White Female</td>
<td>5</td>
<td>5</td>
<td>Elementary, mild to moderate, resource room</td>
<td>3</td>
</tr>
<tr>
<td>Marie</td>
<td>32</td>
<td>White Female</td>
<td>5</td>
<td>5</td>
<td>Elementary, Moderate to severe, self-contained class</td>
<td>5</td>
</tr>
<tr>
<td>Grace</td>
<td>32</td>
<td>White Female</td>
<td>5</td>
<td>5</td>
<td>Elementary, mild to moderate, resource room</td>
<td>4</td>
</tr>
<tr>
<td>Sara</td>
<td>24</td>
<td>White Female</td>
<td>1</td>
<td>1</td>
<td>Private Alternative High School</td>
<td>4</td>
</tr>
<tr>
<td>Elizabeth</td>
<td>34</td>
<td>White Female</td>
<td>0</td>
<td>0</td>
<td>Elementary, mild to moderate, resource room</td>
<td>4</td>
</tr>
<tr>
<td>Lucy</td>
<td>22</td>
<td>White Female</td>
<td>0</td>
<td>0</td>
<td>Elementary, mild to moderate,</td>
<td>2</td>
</tr>
</tbody>
</table>
Timeline. Every teacher who attended the workshop was invited to participate. Two separate recruitment opportunities were given to potential participants. The first was conducted via email to all teachers enrolled in the workshop. The email was sent two weeks prior to the workshop with the intent to complete each participant’s first interview before the workshop began (Moustakas, 1994). However, only one teacher responded to that email recruitment. This teacher was contacted and she enrolled in the study by giving consent to participate. The second recruitment opportunity occurred on the first day of the workshop and was intended to recruit teachers who might not have received the initial email. At this time eight additional teachers consented to participate in the study.

The intensive summer workshop was scheduled for a total of five days of on-site learning that was divided into two days of lecture style delivery of information, 10 days off, then resumed and concluded with three days of experiential observation and practice. The original interview design consisted of three interviews of which the first was planned to occur within two weeks prior to the beginning of the workshop; the second interview was to occur during the ten day interim; and finally the third interview was to occur within one month of the conclusion of the workshop. This schedule was altered due to lack of participant response to email recruitment efforts prior to the beginning of the workshop and as a result each participant was interviewed twice. The questions originally written for the three interviews were divided into two parts (see appendix).
The interviews were scheduled a minimum of two weeks apart, and lasted approximately 45 to 90 minutes each (Seidman, 2006). The first round of interviews started during the initial two-day component of the workshop and was completed during the ten day recess between sessions. The second and final round of interviews began at the end of the last day of the workshop. All but one interview was concluded within 2 weeks of the end of the workshop. The ninth and last interview was rescheduled three different times by the participant due to conflicting work schedules and illness. That interview eventually occurred 9 weeks after the end of the workshop.

**Privacy.** All interviews took place in a private setting such as at the site of the workshop, at the school where the participant was employed, or at the participant’s home. All interviews were conducted without the awareness of any of the other teachers or any of the instructors involved in the workshop and at a time that was convenient for the participant. I transcribed all audio recordings myself with the exception of four interviews that were transcribed by a research assistant. I reviewed all transcriptions approximately one week after initial transcribing to check for accuracy. All transcriptions, once checked, were then sent to the appropriate participant for member checking. Transcription of all 18 interviews occurred over a period of ten months. Due to the time lapse between the interviews and analysis, and in order that I might have the experience of being immersed in the data, I listened again to each interview recording while re-reading the corresponding transcription just prior to beginning analysis of each individual transcription.

**Validity.** Lincoln and Guba (1989) describe trustworthiness as an issue of credibility, and an essential component of qualitative research. Consistent with this definition, I employed
phenomenology, which by design offers a systematic method of qualitative inquiry that is orderly, disciplined, and rigorous (Husserl, 1931). Also, throughout the entire process of data analysis, I made every effort to remain in epoche by journaling and bracketing to keep my own beliefs separate from the analyzed data (Moustakas, 1994). Member checking was utilized by emailing the transcriptions from both interviews to the participant involved. They were asked to read each respective transcription and make any revisions or additions to the information that they believed was necessary to make their meaning clear. They were asked to highlight any additions made and to send them to the principal investigator to be included in the analysis process. They were also informed that reading any revisions were optional and at their discretions. Only four of the participants chose to read their transcriptions and replied that they opted not to make any changes to the original transcriptions, believing that their meaning was accurately reflected in the original version of the transcripts. External auditing was created by meeting individually with two members of my committee and a master’s student in special education to read and discuss my data analysis and my report drafts (Lincoln, & Guba, 1989, Patton, 2002).

Chapter 4

Findings

The findings are presented first as an individual textural and structural description of one participant, Grace’s experiences with professional development. Next, composite textural and structural descriptions are presented to give voice to all participants as they share similar experiences with professional development for teaching students with autism, and to address the primary research questions: (a) What are the background experiences that these teachers report
about their professional preparation to teach students on the autism spectrum? And, (b) What was the common experience gained by the participants during a workshop designed specifically to address best practice for teaching students with autism? This chapter ends with a description of the essence, the core experiences of the participants’ experiences during a summer intensive workshop that they all attended simultaneously.

An Individual Experience

Grace’s individual findings are presented as an exemplar of the participants’ process of arriving at becoming a special educator of children with autism. She is representative of the passion with which the participants described their work, their goals for their students and their efforts for improving their professional practice. Grace went through a process to become a teacher of students with autism similar to most of the participants in the study. She knew no one who had autism while she was growing up. She did not intend to teach students with autism when she decided to become a teacher. She did not receive any information or experience with students with autism during her initial teacher preparation and had difficulty finding appropriate information and support to meet her needs for information and support for implementing best practice. When children with autism were assigned to her resource room, Grace did not have the knowledge or experience to identify them or to design instruction effective for teaching them. She used that frustration to motivate herself to seek means to improve her practice.

Grace: Textural Description. Grace thought that it was “kind of funny” where she ended up because her path to teaching students with autism was not specifically guided. “I don’t remember anyone really, with special needs growing up.” Earning a license to teach students with special needs came through a process of trial and error. She started college in the medical
field, first in dental hygiene, then nursing. Then when she began working at a daycare, her career path took a turn. “I thought, ‘This is what I like to do, I want to work with kids.’” So she changed her major and completed her bachelor’s degree in early childhood education.

After graduation, Grace faced some difficulty in finding a job as an early childhood teacher. So, she returned to college to get a license as a special education teacher. “My move to special education was very much a business decision. That was where the need was.” Grace was hired as soon as she completed her licensure as an Intervention Specialist (IS) in the same district where her own children attended school. In her mind, considering location and salary, this was a perfect opportunity for her and her family. So she accepted the position even though she harbored some concerns that she might not like the job. However, once she began working, she discovered that she enjoyed it very much. “I love what I’m doing now, and I never thought I would.” Grace is currently working on a masters’ degree in special education.

When Grace first considered teaching children with special needs, she was not thinking about teaching students with autism. “I have always been kind of interested in it [autism], but had never been around it. And, I didn’t know if there would be any opportunity so… I didn’t think that specific.” But Grace did want a position that she would not find tedious. “I was afraid I was going to be bored, which was my biggest worry. I’m definitely not bored!”

Looking back, she wondered, “I don’t know where I would be right now” if she had first been offered a job in early childhood. Soon she would face a similar conflict. There would be a kindergarten position opening up in her school district next year and her interest in teaching in an early childhood setting is still very strong. “Teaching young children is what I always wanted to do.”
Grace did not want to pass up the opportunity to teach kindergarten, but she also did not want to leave special education. She was currently teaching in a resource room setting which she enjoyed, but the previous year she worked in the same building as an inclusion specialist. She was dissatisfied with the experience of attending other teachers’ classes to support the students on her caseload. Later that year her position changed from an inclusion model to a resource room setting. Most of her students now spent a majority of the school day with her in her classroom. She liked this setting much better but there was no guarantee that it would not revert to an inclusion model in the future. But given the assurance of her being able to remain in a self-contained classroom, she would not hesitate to stay in special education.

**Importance of Professional Development.** When asked what value she places on professional development Grace responded:

> I think it’s important. You never learn enough. My husband’s a little irritated because he thinks he’s going to be paying for me to go to school the rest of my life. I guess he’s probably right to some degree…. Whenever things pop up that come in the mail at school, I always ask, “Can I do this? Can I do this?”

Grace believes that ongoing professional development is a means for improving student outcomes. “My job is to make sure they’re learning. The students that I have are not where I want them to be. So I am going to do everything I can to improve their learning.” In order to do so, Grace is willing to give her time in the summer to attend professional development. “I don’t mind doing stuff in the summer if … I think it’s beneficial and I’m interested in it.”

**Experience Teaching Students with Autism.** When the second year began, Grace had no students that were diagnosed as having autism. As the year progressed, four of the five received
the diagnosis and the fifth was suspected of being on the spectrum. Grace explained that she did not know enough about autism to recognize the characteristics that her students were displaying. She recalled that it was her special education director who first suggested to her that one student, Sam, might have autism. Initially, Grace disagreed with her. “I didn’t know enough about it.” The more she read on the characteristics of autism, she began to realize, “Yeah, I think, that’s where he’s coming from.” Sam was demonstrating aggressive behaviors at school. Grace began to talk to Sam’s parents about having him tested. “I had him my first year,” but she did not start to suspect that he had autism until the end of that year, “and even then I still wasn’t quite sure.” She decided that regardless of whether Sam actually received a medical diagnosis of autism or not, she would design interventions based on what she had learned in the workshop. “I will still teach him as if he has autism. I didn’t have the tools or experience to do it last year.”

Behavior. Grace believed that her lack of skill and knowledge contributed to her students’ escalating behaviors and restricted their academic progress. The principal was supportive but did not know how to advise her. Neither did the paraprofessionals who worked in her classroom have experience supporting learners with ASD. “There were days when…we looked at each other and thought, “What should we do next?”

Grace was confident that she had adequate academic knowledge to teach students with autism due to her early childhood degree. But, she was concerned that she did not have the training to manage the behavior particular to students with autism. “I feel like I do a decent job already. I feel like I have really good training in physical behavior, [but] this is just different behavior due to the characteristics of autism. I don’t think I was ever taught how to manage behavior from that point of view.”
Grace’s expectations for the workshop were influenced by experiences she had had with two students. The first student was Sam, who due to aggressive behaviors was being considered for an alternative placement. When he had joined her class he had minimal academic skills and severe behaviors. His previous teachers had used restraints to control him. In Grace’s classroom he was screaming to avoid work. The only thing that Grace could think to do when his behavior escalated was to get out of harm’s way and allow the student to act out his aggression.

There were definite days where I had to shut the door and stand outside of my class, and let him trash the classroom. That way he didn’t hurt anyone else. He could only hurt stuff. That was the best thing to do at that point. If we talked to him he escalated even more, so we just needed to ignore him. He was one [child] that had the [class] structure been different, things may have been better for him.

Grace had a second student Bill, who typically started the year well in an inclusion setting but as the year progressed, his academic performance gradually declined. “By the middle of the year he was not doing as nearly as much work as in the fall. Then in the spring he was not cooperative and was making very little progress. Then, by the end of the year we had lost total control.” This had happened two years in a row and Grace thought:

We have got to do things differently next year. There were days where we did nothing but try to keep Bill from running around the room. And he’s so capable. I think that’s why it’s so frustrating because he’s so capable of doing everything at his grade level but he’s not because we spend so much time just managing his behavior. He’s not anywhere (near) where he needs to be because I didn’t have the tools for that. Had the classroom
been structured differently, had I had the training that I had this summer…we probably would not have been in that situation.

Grace was not sure if either of these students would return to her class next year but she hoped that what she learned during the workshop would better prepare her if they did. “There’s part of me that says, ‘I learned all this stuff this summer. Let me try one more time.”’

**Professional Development.** When Grace was initially hired for her current position she was frustrated that no one at her school was able to mentor her in the area of autism or to direct her to appropriate professional development. She did not know where to look for information. She attended a two day training offered by her school district. The focus of the program was specifically on autism.

Last year was my first year of teaching. I went to a 2 day conference by the Board of Education. I had a hard time taking things from it and using them with the students I had. And at that time I didn’t think I had any students with autism. So, it’s kinda hard to make that connection when you can’t apply it immediately.

Grace had recently attended a seminar on balanced literacy and autism that was presented by two professors from her graduate program. “And this summer I took the Introduction to Autism class with Dr. Carmichael. That was a full quarter. We covered the characteristics and the theories and the implications on family life, [which] was a big portion of the course.”

Her school district supervisor had recently sent her to a neighboring district to observe for half a day in a classroom designed specifically to support students with autism. “[I went] to see what they do. That day was one of the most productive days [of my professional development]. I got to talk to the teacher and to see how everything worked.” Grace also met with that district’s
autism consultant and asked her to recommend reading material on specific topics in the field of autism. “I don’t mind doing the research and finding out stuff on my own and teaching myself, but I do not know where to start sometimes. I think that was my biggest problem.”

Observing the classroom helped her realize that there are methods to improve her situation. Seeing the students’ behaviors helped her not to take it personally when they went off. And, alternatively, it made it easier for her to expect more from her students, including their capability to do independent work. “Seeing that school, and seeing the students that have the same issues as mine… This was a real eye opener for me. They were using the bins and the work stations and they all had schedules. They were doing things independently and it all worked for them.”

Prior to this observation Grace had believed that in order to get her students to complete assignments, every lesson had to be teacher directed. When she tried to give them an independent assignment, they did not respond positively. “They would have to be prompted and it was a struggle. I think that is a really important skill [working independently] that they need. They’re gonna have to either learn that [to work independently] or have someone sitting there constantly. And that’s not going to work as they get older.” During the observation Grace had seen students working independently and believed that it was important to teach her students this skill. She had seen how effective structure and routine had been in reducing disruptive student behaviors.

**Workshop Goals.** In addition to working independently, Grace’s goals for this professional development opportunity were to learn how to establish a behavior protocol for her students in both the general education classroom and the resource room as well as to learn how
to better use visual schedules towards more acceptable behavior outcomes. “I want to find something that works for my kids no matter where they go, [a protocol] so we can say, ‘This is what you do.’” Lastly, she wanted to design a schedule to utilize the paraprofessionals’ time and skill more efficiently.

**Observation.** The summer workshop was scheduled to coincide with a summer program for children with autism in order that summer workshop participants could observe and meet with the teacher being observed in order to reflect on what they saw. This gave Grace a second opportunity to view a different classroom designed with evidence-based practices for children with autism.

I liked talking with the one teacher and seeing all of her organization and her giving us all of the ideas that she uses and why this works for her. That was probably one of the most beneficial things. Seeing other classrooms and talking to other teachers just about the logistics and seeing that there are different ways that classrooms can be set up and why it works for them. I think that was very beneficial.

Grace was one of the few workshop participants who were asked to enter the classroom and work with a student, one-on-one. “The whole thing was just too artificial and too uncomfortable for me. I would much rather observe. I liked to see the different classrooms.”

**Workshop Benefits.** Now that Grace had attended this workshop, she was able to reflect on previous classroom situations and consider different approaches for teaching children with autism. She explained that she before attending this workshop she had taught most of her classes using a teacher directed style. “I think I ran my classroom more like a typical classroom, just smaller.” She also came to suspect some additional techniques that were missing in her previous
attempts. “It probably wasn’t consistent enough and my expectations were probably not clear enough to them. And it wasn’t something I had practiced with them.”

Academics. In the past, the focus of Grace’s instructional focus had been on academics. She had struggled with teaching her students academic content because they did not have behavior supports nor the pragmatic skills to do basic school work independently. Since participating in the workshop she was now committed to making behavior skills and independent learning skills a priority along with the academics. “It’s about teaching them life skills that they need to have. They need to know how to work on their own because there’s not going to be someone next to them for the rest of their life.”

Independence. As a result of the workshop Grace had acquired a better understanding of how to guide students into becoming more successful in completing their independent work.

So I think the idea of making everything they do independently, easy…that they can easily do on their own. I didn’t necessarily do that (in the past). They probably needed support. (Before,) I probably made it too hard for them to do independently. I think now that I kinda got permission to make it easy for them.

At the conclusion of the summer intensive workshop Grace reflected on instructional changes that she would make to improve student performance, based on the information that she had acquired.

I think I now know what to do….like, how to structure my student’s days. [Before the workshop] I knew something needed to be different but I didn’t know what it would be or how to do it. I definitely have lots of things to try now.
Grace also said, “[I will] definitely be using work stations and visual schedules. We’ve toyed with different visual schedules and nothing that we have done has worked so far.” She said that previously she did not understand why it was important to implement these student supports but now she does and this motivates her to start using them. “So, I think I understand better what the purpose of the visual schedule is, and why it’s important. In addition to using the work stations to teach independent work, she believed that these two instructional strategies would be the most important for improving the functionality of her classroom.

**Future Professional Development.** Grace noted information that was missing from the workshop that she would still like to learn, “Everything was so basic and functional… my kids were so beyond that…. I think because most of my kids are higher functioning, one of the things I really want to learn is social skill instruction…and probably more about reading instruction.”

Grace believes that she will be involved in professional development the rest of her life and as such, life-long learning is very important to her. The key to that is her belief that she can never learn enough. She prefers to take classes all the time, spread out instead of chunked together because she has a family and a full time job. Also, she believes that taking fewer classes at a time assists in her motivation to do a good job. If people think that she does a good job by judging her performance, then she wants to improve that performance. One way is by listening to others with more experience. She believes that it is her responsibility to improve her students’ learning abilities. “What I take [learn] helps me set up a better learning environment. The more that I learn, the more I can take what I learn and use it to help them.” Grace believes that in order for her students to get better, she has to get better.
**Grace: Individual Structural Description.** Grace did not recall knowing anyone with special needs while she was growing up. She said that her interest in special education began in adulthood. She did remember writing a paper in High School about autism. She found it interesting that she was now teaching children with autism. But she could not identify any specific event or particular influence that directed her into special education. Hers was a “business decision”.

She explained that she looked where the demand was in the job market and based this career move solely on her need for employment. However, taking into account her passion for teaching children with special needs, it appears that her decision might have been influenced by other, more subtle factors.

Perhaps, she believed that, her husband’s concerns with paying for ongoing training could be swayed if she presented her desire for additional education as a business decision. Possibly, she believed that she must convince him that adding a special education license to her professional qualifications was a profitable move, one that would help guarantee employment and thereby justify the initial costs.

Grace worked in a Head Start preschool program during college. She had one student who was diagnosed with bi-polar disorder. She found the experience fulfilling both as a teaching challenge and from what she learned from him. Although, she did not believe that this experience was pivotal in her decision to go into special education, she did state that she valued it personally.

Another likely explanation for Grace’s career decisions are her consistent interest in service professions. She started college in a nursing program before changing her major to education then adding a license in special education. She describes a passion for the types of
experiences that special education has presented to her. Her fear of boredom and desire to be challenged perhaps led her to work with children with special needs. She states that she is very happy in her current position, teaching students with autism in a self-contained classroom.

Yet, Grace was still conflicted about teaching in early childhood education. She mentioned that she was even now considering a career change. She had been offered a Kindergarten position in the same school district for the next year. She was in the process of deciding whether to remain in special education or make the change to an early childhood position. She stated that she loved what she was currently doing, teaching students with autism and was not ready to leave.

Part of her dilemma was that there was no guarantee that the special education position would not revert back to an inclusion specialist position and she did not enjoy working in other teacher’s classrooms. Conversely, she stated that if she could be guaranteed that her position would remain as it was, she would not hesitate to stay in special education. Perhaps her contradiction was in part about insuring that she would have her own classroom. Perhaps it was also influenced by the limited resources she had for teaching students with autism including a lack of community, collaboration, and professional development opportunities which were plentiful in early childhood education.

**Importance of Professional Development.** Grace entered into teaching children with autism without professional preparation. As a result, she ran her classroom the same way that she had experienced being taught as a child. This is what Lortie (1975) calls an “apprenticeship of observation” (p. 4). New teachers use instructional strategies that they learned during the years that they themselves were students.
Regardless of Grace’s initial intentions to prepare and work in special education, she was now very passionate about teaching children with autism. Her passion led her to a sense of responsibility to seek opportunities for ongoing professional development. She believed that there was a direct correlation between her student’s performance outcomes and her own skill and knowledge levels for implementing best practice for her students on the spectrum.

In this respect, professional development for Grace became a means to improve her students’ quality of life. She believed that her students’ behaviors had a negative effect on their learning and in part were a result of her not understanding how to manage the classroom effectively. She felt responsible when a student’s educational team considered removing them from her classroom, implying that alternative placement was necessary due to her lack of skill and knowledge.

Grace explained that during the past two years, she has had difficulty finding information that she could use to support her students. She was frustrated that no one at her school had the knowledge or experience with autism to mentor her. Recently, Grace had participated in several professional development programs and classroom observations. She was beginning to make contacts and access resources, becoming acclimated and included in the special education community. She feels that talking with teachers and supervisors who work directly with students with autism about their experiences and their knowledge of best practice improves her own practice and her students’ success.

At the time that Grace was participating in the summer intensive workshop, she was also working toward her master’s degree in special education. She had registered for the workshop and committed to completing the required assignments even though the credits offered would not
count toward completion of her master’s degree. In all of these instances, she was demonstrating a consistent level of dedication to better serve her students with autism.

**Teaching Phases.** Grace’s first and second years of teaching similarly followed phases that all teachers experience. Novice teachers’ first experiences include exploring how to teach and survival of the demands placed on them (see Fessler & Christensen, 1992). For Grace, this was a time of gaining general knowledge about the skill of teaching and the specific skills required for teaching students with autism. As teachers move into this phase they seek and learn new ideas to improve student outcomes. This involves reflection and assessment of student performance which might result in redesigning lessons and then reinforcing feelings of accomplishment (Huberman, 1993a) or, as in Grace’s case, a realization that more knowledge was needed. All teachers move in and out of these phases according to their own individual experiences and the degree of influence and support they experience within the environment in which they are teaching (Huberman, 1993a).

After the workshop, Grace believed that the problems she faced were solvable with training. She was motivated to try new ideas and fresh approaches that she had learned in the summer intensive workshop. She placed great hope that these would help her resolve many issues with regard to student behavior and performance.

**Composite Textural Description (All Participants)**

**Introduction**

The nine teachers who participated in this study were enrolled in a summer intensive workshop where they received intensive training on research based teaching methods for their students with autism. All participants except one were currently employed as special education
teachers. The exception was Marie who had five years experience teaching students with autism but was currently working part time as a special education consultant to teachers of high school students with autism. Each teacher was responsible for teaching the core academic courses to their students with autism who spent the majority of the school day in their resource room.

**Teacher Preparation**

All of the teachers were licensed teachers and had completed their initial teacher preparation. Three of the teachers were recent graduates with zero to one year of teaching experience and were in the new teacher induction phase of learning. Three teachers with five to six years of teaching experience represented the continued learning phase on the continuum of teachers. They reported previous participation in a variety of continuing professional development programs. The remaining three teachers each had 11 years of teaching, and at a level of expertise which would enable them to teach and mentor others (Feiman-Nemser, 2001).

All but one participant had a bachelor’s degree in special education. The exception was Amber who graduated with a degree in English and later earned a special education endorsement. No one had a degree or endorsement specific to teaching students with autism. All participants reported that, at best, the coursework covered only the basic characteristics descriptive of children with autism.

Five of the nine teachers had pre-licensure experience, working with or knowing a child with autism. They had either volunteered or worked in a temporary educational support position or in a college practicum placement with a child who had autism. They explained that any formal training they had participated in had occurred during induction, and after they had been hired for their first jobs as full time teachers of students with autism. Carly explained,
I had no training. In my undergraduate [program] I took a generic class like, “Here is every disability you could possibly encounter and I’m going to tell you [about them] in 16 weeks.” Then I had an SBH (severe behavioral handicapped) and an LD (learning disabilities) class but there was no autism specific content. So I went into my first class [teaching students with autism] having no clue.

Alicia’s undergraduate degree was in special education where she says she received: “absolutely no formal training” specific to teaching children with autism. Since graduation she sought information applicable to teaching children with autism. “My training has been self-motivated … self-study and [from] on-the-job experience.”

Ellen graduated from her teacher training program in 1996. “When I went to college, autism was just a paragraph in the book. It didn’t give you enough information…you didn’t have to take reading methods or math methods, those core things. More of my background has been multiple disabilities, medical issues. We were focused on a lot of the health needs that went along with the different syndromes.”

Marie’s bachelor’s degree was in special education for students with mild/moderate needs but she was hired to teach students with severe needs. Marie, unlike the other participants, believed that she had adequate training to begin her first teaching job, “[It was] more because of the outside experiences I’d had than [due to] my undergraduate training.” Throughout her four years in high school she spent her study hall period volunteering in the special education classroom for students with multiple disabilities. During the summers she volunteered at a camp for children with disabilities. “I did that for probably six or seven years…most of my high school and college [years].”
Sara explained that, “In college, we didn't have any specific classes geared toward autism but it was always addressed as a category of disability. So, there was probably one week in a course that we would focus on it specifically.” Sara graduated from college one year prior to taking the summer intensive workshop and was now employed to teach young adults with autism. She believed that her mild to moderate training had left her at a disadvantage. “It’s just more difficult for me having a mild to moderate certification and working with autistic children. I guess I’m not trained to work with students with intense needs. I just feel like there are several more aspects involved because of the autism and it’s very individualized.”

Elizabeth had recently graduated with her bachelor’s degree in special education. She explained that during her undergraduate preparation she took a course where she learned instructional strategies for teaching reading to students with moderate to intense needs. Although the course did not cover information specific to autism, it included a tutoring practicum with students on the spectrum, “We worked with kids with autism in our tutoring sessions. And we did learn about structured teaching, but that’s it. I can’t think of anything else [coursework] that was specifically on autism.” Elizabeth was required to do two separate student teaching practicum placements, one in a mild to moderate placement and one in a moderate to severe classroom. “The first classroom meeting during my mild to moderate student teaching, [the professor had invited] the people from the autism unit to give a ten minute power point about autism. My [moderate to severe] student teaching was in an autism classroom. I learned a lot from the teacher giving me resources and explaining how kids with autism process information and seeing the structured teaching in place. That’s where I learned the most about kids with autism.”
Lucy had also recently graduated from college with a bachelor’s degree in special education. She recalled, “I never had any classes on autism at O--- State. They do use the ABA approach in their teaching of all special ed [education]. I’ve never had any actual classes on just autism.” During her field placements Lucy had worked with one child who had autism. “I worked in a lot of MH (Multiple Handicapped) classes… and I recall a kid with autism in those classes.”

**Induction.** After graduation the novice teacher participants began their first year of teaching and entered into the induction phase of learning. During this phase new teachers continue their teacher training by interacting with experienced teachers who serve to mentor them. Participants who were experienced teachers reported that when they started teaching students with autism there was no one qualified to serve as their mentors. The degree of support that they received from their administrators and co-workers ranged from well-meaning and empathetic to non-involvement.

**Special Education Director.** A majority of the participants reported that they seldom saw their special education directors and that when they did, they did not receive much support or information from them that was directly applicable to teaching students with autism. Grace explained,

I have a special ed [education] director that doesn’t influence my teaching whatsoever [laughter]. I kept asking her [for] resources. I kept asking for books, articles, authors, anything. I got nothing. She’s supposed to be an expert in what I’m doing. She’s on the Autism Council and her background should’ve been very helpful for me in my
classroom...so, not a whole lot of support there. I was very frustrated this year. That caused me more frustration than anything else.

When Ellen mentioned to her special education director that she needed an additional paraprofessional to support her students who had moderate to severe physical and mental disabilities she said that, “He would just shake his head and say, ‘I’m sorry Ellen I feel bad for you, if you could just make it through the year.’” Ellen knew that she was going to have the same students for several years and that, “Making it through the year isn’t going to help me because these same students are going to come back to me in the fall.”

Three participants mentioned that their special education directors had not visited their classrooms with any frequency. Marie complained that, “She [the district special education director] has walked into my classroom probably three times in five years.” Ellen stated that, “The special ed [education] director, to my knowledge has never been in my classroom.” And, Grace explained that, “When I invited her [the special education director] into my classroom I got, ‘I don't have time to do that.’”

In contrast, Sarah worked in an alternative high school program. Her supervisor was the program coordinator who had an office in a separate building on the campus. “We meet at least weekly in the morning and we discuss different aspects of the program but she pretty much lets me run my own building [classroom] and if I need any help, I can always go to her.” When asked if she believed that this was enough guidance for her, being a new teacher as well as new to the program, she replied, “It’s really actually nice to have the freedom to teach what I want to teach and focus on different skills and their IEPs and not to constantly have someone over my
shoulder. At public school I was always being watched and it was documentation like crazy and here it’s more relaxed and I can really focus on specific skill sets. I like that.”

**Principal.** The participants were asked to describe the degree to which their principals influenced their teaching of students with autism. The degree of support received from the participants range from very knowledgeable and supportive, to supportive with admittedly little knowledge. The participants who were beginning teachers had only recently met their principals. Amber explained that,

> Our assistant principal has a lot of influence on how we teach. We just got a new assistant principal this year who worked in special education. She kind of gets it. She gets that functional skills is curriculum which’s really nice and, that special ed [education] is not necessarily sitting at a table for half of a day doing one on one direct instruction.

Three participants described that their principals were encouraging regardless of their lack of knowledge about teaching students with autism. Ellen commented, “Well at this point, for the majority of my students, they [the principal and assistant principal] know the kids. They’re at the IEP meetings, [and were] very helpful, very supportive.” Grace described,

> She's [the principal] been very supportive of me throughout the school year, supportive in a way like, “I'm here for you but I have no idea what to tell you to do.” She’s pretty much happy with whatever we did. Special ed is not her background... She kind of relied more on me to get her information than the other way around.

Marie explained,
My principal [and I], we have a positive relationship. He… acknowledges that he doesn't truly understand my job, but totally respects my decision-making. So I felt comfortable going to him with questions, ideas, proposals. He trusted my professional judgment. So that allowed me to think outside the box and feel like I could try new things because I knew he supported me.

Lucy and Elizabeth, first year teachers, would be working with their principals for the first time in the fall. Since being recently hired, they had both spoken with their principals over the summer. Lucy stated that, “I can say the one who I have the most contact with would be my assistant principal. She has been very helpful to me.” Elizabeth described the relationship she anticipates having with her new principal,

She [my principal] seems to be my contact person for any information or problem solving. And if we can't figure it out, she'll bring someone in to do it, if I need a behavioral consult or something. And, she also seems very knowledgeable about the students’ backgrounds and their families. [Which] coming in as a new teacher has been helpful to me. And she seems very open and understanding and as a new teacher with anxiety, she is reassuring. She is a good contact person.

Co-workers. The participants were asked to describe any co-workers who had assisted in their learning about teaching students on the spectrum. No teacher mentioned that they participated in any type of mentoring program early in their careers or worked with any co-workers who were knowledgeable in teaching students with autism. Elizabeth, a first year teacher, said, “It's like an island. I'm not on a team….They don’t consider trying to include these
students [with autism]. Therefore, they don’t put me on a team with any general education teachers.”

**Support Personnel.** A majority of the teachers had mentioned that they had increased their knowledge by working with support personnel in the field, mostly occupational therapists (OT), physical therapists (PT) and speech and language therapists (SLP) who worked with the students in their classrooms. Ellen described the advantages she has due to working with her support personnel.

I’ve learned so much from the different PTs and OTs….my SLP is…good…not necessarily versed in autism, but, she was a good SLP. She was willing [to help]. [She] just didn’t have the background or knowledge [specific for children with autism]. Most of my kids don't get PT. But, the PT that we had [in the building]…was really good about sharing information. She was very passionate about what she did.

Ellen went on to explain that although the PT did not have experience specific to children with autism, she did know about sensory issues. “Our actual OT is not very helpful, but our OT assistant is awesome. Her wheels are always turning. She's trying to find new things for kids with autism….Somewhere along the line she picked up some things [knowledge about] sensory. She definitely gets it. So, she does a really nice job of that.”

Carly believed that the therapy with her students was not as effective as it could be. She hoped that what she had learned in the workshop would help to improve therapy for her students.

We have good ones [SLP and OT]. There’s no support in the classroom and there’s really no time to collaborate which I’m really sad about because I’d love for them to come in [to do therapy in the classroom]. I’m hoping that this year I can sort of change that,
where at least I can say “This is what I’d like to do. I’d like to incorporate your goals [into our] daily [schedule].

Amber stated that she had learned a great deal from working with the speech therapist in her classroom. “You have to have a strong speech therapist. You have to have a strong OT. You have to have a good relationship with them to have success.”

Marie mentioned that her relationship with the OT, SLP, and PT was, “Always positive…but never as collaborative as I would like them to be just because of time (sic) restraints.” Marie explained that the OT and the PT had experience working with students with autism but, “My speech [therapist]…I was teaching her. She was old school, trained to teach kids who stutter. So, I was doing a lot of the facilitating with that. She [OT therapist] showed me things and we did them. She took the time to teach me how to do it, so I felt empowered to know that realm of things. The PT…she taught me stretching and mobility things [for students in wheelchairs].” Marie said that the PT provided her with information and training so that she could provide sensory therapy more frequently than limited only to when the PT was available.

Alicia, whose students were high school aged, mentioned that their students do not receive support services from either an OT or SLP. “My students in the past have not received any other support. On very rare occasions I think I had one child that had a speech path [pathologist].”

Sara’s students did not receive support from an SLP or an OT. “I wish they did. They don’t unfortunately. That’s something that we desperately would benefit from.”

**Continuing Professional Development.** The participants who had between five and 11 years experience had taken the responsibility to find training beyond their workplace. Most had
experienced difficulty in finding training appropriate for teaching students with autism. Ellen said, “I would go online looking for different classes that had to do with autism and there really wasn’t a lot out there.” Elizabeth had a similar experience, “It’s kind of overwhelming and … it’s hard to know what is available.”

**Appropriateness.** Amber who continues to participate in ongoing professional development commented that often programs about teaching students with autism were focused at an introductory level. “I have been doing this for awhile and everything seems to be for people who are just starting out. If I hear ‘Autism is a neurobiological disorder’ [one more time]... I’m going to scream!”

Ellen had 11 years experience teaching students with severe disabilities, including students with autism. Currently, she was serving students with autism in a multiple disabilities resource room, along with students with cognitive and physical disabilities. She described recent training she has taken specific to autism as follows: “Since graduating, I’ve done every seminar I can possibly get myself into… that was specifically on autism. I would take different seminars and workshops and get one little piece [of information]. There are a lot of gaps.” Often the information presented was too basic for her degree of experience. She described one conference that she attended as, “Unfortunately, [I] sat there for six to eight hours and they explained what autism looks like. And I thought, ‘Dear God, the district paid $200 for me to come here to have them to describe my [own] students to me.’ It was a complete waste of time.”

In addition, two participants discovered that teacher training seldom addressed the needs of older students. Alicia and Marie worked with high school aged students and had difficulty finding professional development programs at the high school level. Marie asked, “How do we
get the same structure and fluidity that you see in these very well built structured classrooms when we’re talking about higher kids, older kids…when they are still taking standardized tests? So that’s really where I’m looking to gain information.” Alicia explained, “There is a lot out there for elementary and lower [aged students].” She frequently had to take the elementary information and “adjust it to fit my students.”

**Quality.** Amber suspected that some workshop presenters and classroom consultants had limited knowledge and experience teaching children on the spectrum because their suggestions were often not practical. “Sometimes you go to these workshops, and you wonder, ‘Holy Mackerel! What has that person been smoking? Have they ever met a child with autism?’ You know there are consultants who have never actually tried to run a classroom with six kids and manage six adults at the same time. It’s just a very different perception.”

Carly had just completed her 5th year teaching children with autism. “I have attended so many things where [when] I leave … I’m like, ‘Well, that was a waste of time. That was a day I’ll never get back.’” After her fourth year of teaching, she accepted her current position and changed school districts. There she received training specific to teaching children with autism. “Last year when I started in this district, they bombarded me with autism training and it’s been fabulous. I bet I’ve had something at least every other month.”

Alicia was entering her 11th year of teaching special education and every year she has taught students with autism.

My brother has a child with autism. And I’ve had some very interesting students with autism, which also prompted me to learn more about it. I actually initiated [taking ABA] training myself…[where]…they talk about autism [in general].
She remembered attending a one hour program on autism offered by her school, “I should say that there’s been some in-service workshops at my school, specific about what autism is, but no training on how to teach [students with autism].”

**Current Research.** Despite where they were on the continuum of teaching experience, each participant valued ongoing professional development. Most stated their belief that there was a direct correlation between student outcomes and the quality of their own training. Carly said, “Those of us who truly want what’s best for our kids, have to continue doing professional development. I think best practice changes so much [that if you do not stay current]… you can get stuck in a rut.”

Three of the participants stated their reason for participating in professional development was to stay current with the research and best practice. Alicia believed that, “It’s important …to always improve or to want to improve and do the best for your kids.” Grace felt that, “The students that I have are not where I want them to be. So I am going to do everything I can to improve their learning.”

Elizabeth stated, “There’s new research out …and to be effective as a teacher you have to know what’s going on. You have to know what the research says, what’s effective practice, what’s evidence-based…if you’re doing things that are not evidence-based, … you’re kind of wasting time.”

Amber shared “I think it’s very important and I’m constantly going back. There’s always new info out there and you have to keep current. It’s just important to stay plugged in to that academic community.” Lucy said that she puts a very high value on professional development. “It’s key …in special education where things are changing rapidly, especially in autism.”
Graduate Degrees. Two of the participants had completed their master’s degrees in education and two earned their master’s degrees in special education. A fifth participant was currently working toward her Master’s degree in special education. One teacher had a lifetime special education license and had no plans to get her Master’s degree. The three remaining participants, who were in their first and second years of teaching had intentions of starting their master’s work in the near future.

Limitations to Professional Development

Time. In addition to the lack of adequate programming, each teacher mentioned additional limitations to their continuing professional development such as funding, time, and finding substitute teachers. Marie mentioned that finding the time for professional development was a problem. “It turns out to be your own personal time a lot of the time, like in the summer.” Alicia also said that time was a hindrance, “It’s hard because when you’re working full time, you’re tired.” Amber stated that time was a hindrance for her as well.

Money. Ellen said that funding was a hindrance to her continued professional development. She wanted to continue her graduate education, “I’m very interested in getting a master’s in Autism.” but she was currently paying on previous educational loans. “I have $50,000 in school loans already and I have a daughter that will be starting college next year and I was looking at another $20,000 for a master’s degree.” Carly described her funding issues, Money is a limitation. Right now it’s just hard to pay out of pocket for any kind of professional development, and in our district, we’re not passing levies. So, there isn’t that professional development money to send you places. I took my master’s online because I
could not commit to going to class with three little kids. My family is my first priority. So I just couldn’t justify that.

Amber’s school district usually funded her continuing professional development. “My district is very good about paying for things. And, luckily, I’m at a point in my life where I can pay for it and be reimbursed.” Likewise, Alicia’s school district funded some of her professional development, “I’m getting tuition reimbursement but because I have my master’s already, they’re only paying for 6 credit hours.” Alicia was also working toward becoming a board certified ABA analyst but had to finance the training herself, “It is very, very expensive. So, I’m not sure I can continue that.”

Elizabeth was concerned that she might not get financial support from her school district. “I know especially with levies not passing it’s going to be hard.” Lucy said that she was worried about paying for future professional development. “Luckily my district has tuition reimbursement.” Sarah believed that financing her continued professional development might be difficult. “They [the school district] helped me pay for this [workshop] but I don’t know how many times I can go to them.”

Substitutes. Two teachers also mentioned that in the past they had had difficulty finding substitute teachers to cover their classes while they attended professional development programs. “I hate having subs [substitute teachers]. It’s just so difficult. I actually had one come two years ago, [and after 20 minutes] … she told the school secretary that she was leaving. She had never worked with students with special needs before and she was completely overwhelmed.” Elizabeth said that, “Sometimes school administrators don’t “want to send you ‘cause they have to get a sub…. In my case with the subs, no one wants to go into my room.”
Summer Intensive Workshop

Despite their individual efforts to improve their practice and student outcomes most participants shared a common frustration with the quality and appropriateness of the information they had acquired in professional development programs to this point. Therefore, they placed a great deal of value in this workshop. Most teachers said that their special education directors, supervisors, or principals had strongly recommended this workshop and that they provided the funding as well. This endorsement by their superiors influenced their expectations that their professional needs would be met. Grace commented, “I think it’s going to completely change the way I teach.”

Much of this anticipation was due to the fact that the workshop leaders were noted professionals in the community, each credentialed, and experienced in working with children with autism. Workshop instructors described and demonstrated the most effective evidence-based instructional strategies found to effectively improve student outcomes. This gave the teachers a sense validation from the research and assurances from professionals in the field, that if they followed this instruction, their students would likely experience success. They believed from the presentation that this information would bring about positive changes in their classrooms and were motivated to try. Carly explained, “These people [workshop presenters] are telling me that this is best for my kids. That’s what I want.”

Individual Participant Goals. Each of the participants had identified her own personal/professional goals for this workshop. They generally wanted to improving their teaching by implementing EBP to student outcomes. Their common motivation for learning was to meet their students’ individual needs.
Communication. Amber’s main goal for this workshop was to learn how to improve on the students’ functional use of the communication devices. “[To] make them a truly functional communication system in the environment and at home and in the classroom and in the community, because we do community outings as part of our program.”

Intervention. Alicia’s goals for this workshop were to learn to “troubleshoot” and identify why a student is not being successful, “Identifying how to collect base line data and what to look for.” Alicia also said that she was very passionate about intervention which was another area that she wanted to learn more about. She stated:

I’m looking for intervention resources to help me help the children. I think that’s a big issue. I think that intervention needs to start early or you’ll have really big kids with really big problems that could have been thwarted when they were younger.

Ellen felt that her students were not getting enough one-on-one instructional time with her. She reflected on this by saying,

I didn’t feel like I was always giving the kids what they needed. We have a lot of structures in place, visual schedules, and drawers but I’d like to make it all fit tighter. How can we handle it when I need to be in two places?

Organization. Carly stated, “My two goals for this class is [sic] to have a work system for each kid at their level and a rotating adult schedule.” Elizabeth also stated that her goal for the summer workshop was to learn the best way to organize her classroom prior to the beginning of school.
I want to be able to set up my classroom, specifically talking about the physical structure, in a way that is supportive of how kids with autism think. Even though I only have one kid with autism, I think it will help all of my kids because … they still may have anxieties or need a predictable structure too, even just physically. And when the kids come I want to have instructional strategies and work systems in place and set it up as structured teaching.

**Differentiated Instruction.** Lucy’s undergraduate work included a practicum tutoring students with severe needs but when school started, she would be teaching students who had moderate needs and at different grade levels. She wanted to improve her skill at designing instruction that met her individual student needs. She explained that,

[Learning] how to differentiate instruction is really big to me because these are higher functioning kids and it’s not going to be all functional skills that I’m teaching. That’s where most of my experience has been. I really want some tips and tools for that.

**Behavior.** Grace wanted to learn to make better use of visual schedules for her students to follow throughout the day. She also wanted to learn more about writing behavior protocols for her students so that all of the adults could implement these in any setting. She wanted to ensure consistent procedures and expectations for her students in the area of behavior in both the resource room or in the general education environment. Carly also mentioned a need to learn more about managing student behavior.

Last year my student Katie had several behavior issues and I never knew what triggered them, and I don’t know what to do in the midst of a behavior meltdown. How are you
supposed to get them redirected to sit down? I still don’t think I have the answer to that.

That’s probably where I struggle the most.

Carly did not anticipate that she would learn how to address severe behavior issues during this training. “I would really like to take a behavioral class.”

**Resource for Inclusion.** Several participants mentioned that their motivation for continued professional development came in part due to a personal desire to be a resource for general education teachers who have students with autism included in their classes. Elizabeth stated, “I also want to be able to be a resource because I think a lot of [general education] teachers don’t understand [autism].” Elizabeth had recently had an experience in her student teaching where she worked with a boy who had autism who was included in the general education classroom.
He was expected to be able to comprehend given the same information that the other kids were given and it was not successful. So we saw a lot of behaviors as far as getting off task because he didn’t know how to do it. He would say, “I don’t understand.” It looked like to the other teachers that he was being lazy. Maybe if I had understood more, I could explain to them or just helped him.

Elizabeth said that she regretted not being more knowledgeable herself in order to give the teachers some suggestions. “The gen ed [general education] teachers tried but I think you have to first understand how the kids with autism think, how they behave, how they understand things to be able to ... teach them effectively. Specifically in the general education setting where kids with autism are included, [they needed] way more visual support than they were given … just that change would help tremendously.”

Alicia and Carly also expressed a desire to help others with their knowledge about teaching students with autism. Carly said, “I really would like to [eventually] be a supervisor of special ed [education] or a consultant, and go out and use my knowledge.” Alicia would like to be considered an expert in her field, “Someone that teachers could come to and say, ‘Oh, I’m really having trouble with this kid. Can you give me ideas?’” Alicia went on to explain that,

Sometimes my motivation for training is to be accepted and respected as a professional because I think that my experience in the years has taught me so much…It’s true. There are so many times I knew and I had to work hard… sometimes against the grain… for people to respect my opinion.

Grace also expressed a desire to learn more about how to support students who are included in the general education classroom for most of their day. “There are kids in our
classrooms that have Asperger’s that aren’t on my caseload and it would be nice [for me] to be a resource for our classroom teachers.”

**Classroom Observation.** Each of the teachers, who participated in this workshop, without being specifically asked during their interviews, mentioned the same experience as being very beneficial. They each had remarked that they valued the opportunity to observe in an actual classroom that was specifically designed to address the characteristics of children with autism. There were two communication classrooms for children with autism in session during the same days as the workshop. These classrooms were referred to as “communication classrooms” because they incorporate much of the current research and teaching techniques that have been identified as best practice for students with severe autism. The workshop schedule included two separate, one hour observations, on different days, in each of the two classrooms. Sarah explained how she found it helpful,

I really liked going into the classrooms. Those rooms were so nice and organized and ideal. It was really nice to see the visual schedule and see how the children actually did it. I had never seen a visual schedule before. Then I got to work with one student with PECS (Pictorial Educational Communication System) and I had never worked with PECS before. Just seeing actual child/teacher interaction was really helpful for me.

Grace thought that the classroom observation experience was one of the most valuable exercises that had been planned for the workshop.

I liked talking with the one teacher and seeing all of her organization and her giving us all of the ideas that she uses and why this works for her. Seeing other classrooms and talking to other teachers just about the logistics and seeing that there are different ways that
classrooms can be set up and why it works for them. That was probably one of the most beneficial things.

Marie found the experience of observing both positive and negative aspects of the classroom as being a valuable learning experience for her.

Seeing the classroom was beneficial both to point out things that we liked and also to point out things that were missing or that we didn’t like. It was not necessarily a picture perfect classroom but to see a classroom in action and to see what was good and bad. I think that was great.

Three teachers specifically mentioned that observation and interaction was the way that they learned best. Amber commented, “Seeing it in action was great.” Lucy, acknowledged, “That’s how I learn the best.” And, Alicia explained,

I’m the type of person that really needs an example. So that really helped me a lot. I really liked [seeing] the classroom schedules, the way they had them set up. I couldn’t visualize it until we actually went in there and [saw] the individual schedules hanging on the walls. Then I saw it and I understand it now.

One of the classroom teachers used her lunch break to sit with the observers after her students had left. She answered their questions and shared her ideas and made suggestions based on what she had learned through trial and error. Two participants who observed considered this to be a valuable experience for several reasons. Elizabeth and Alicia spoke about talking with the classroom teacher. Elizabeth said, “Sitting down and talking with her for an hour and a half was amazing … hearing from a teacher that it’s ok to make mistakes. It’s going to happen.” And,
Alicia commented, “Talking to the teacher helped and the examples that she had for schedules, huge help, huge help.”

**Teacher Outcomes.** Once the summer intensive workshop concluded the participants were asked to reflect on what they had learned in the workshop. Most of the teachers said that they had gained valuable information and that for the most part their goals were met. Carly recognized that she had been exposed to a few of these ideas before but most of the information was new to her.

This is probably the best thing I’ve ever done. There was so much information and it was all applicable to my teaching. It was excellent information with excellent resources and websites. I did not waste any of my time.

However, there were still areas where they needed more information. They knew that this would always be the case and that they would be seeking additional professional development programs in the future.

**Literacy.** Amber valued the information presented on teaching literacy.

I got more out of the workshop than I was hoping too. I didn’t really know a lot about teaching literacy skills [to children with autism]. A lot of stuff about kids with autism only focuses on behavior. They did touch on instruction. A lot of time you go to workshops and they do not touch on instruction at all. And it was practical.

Amber went on to explain that she was not expecting to learn anything new about teaching literacy to her students with autism who had severe needs. She had never thought to use a method of discrete trial to teach literacy skills.
I talked to the instructor quite a bit about it. I used discrete trial for a lot of compliance, expressive, and receptive language, matching, even teaching sight words, and that kind of stuff. But to start using it to teach writing instruction, answering “wh” questions—that was all new to me. So, that was really exciting. I never really thought about using that methodology to teach … that kind of instruction.

Elizabeth was also surprised that the workshop included information about teaching literacy to students who do not display literacy skills. “We sat down and talked about literacy instruction and different ways that [it] might look as far as the kid who can’t write or can’t read… I think we could do a whole workshop on that [literacy].”

**Behavior.** Marie appreciated hearing the behavior information. “They talked about how easily we can reinforce a behavior without knowing that we have. That was very interesting. Even if we’ve heard it, I think we forget it sometimes.”

**Scheduling.** Sarah and Grace thought that the information about scheduling and support for independent student work was helpful. Sarah explained, “We talked about scheduling and…work that they can do independently and I’ve been looking for that.” And, Grace emphasized, “I will definitely use visual schedules and the work stations to teach them independence.” Grace appreciated that the instructors not only demonstrated how to implement the teaching techniques, but also explained why to implement them for student success. “I think I understand better what the purpose of the visual schedule is, and why it’s important.”

**Changed Beliefs.** Participants were asked to identify any beliefs about teaching students with autism that might have changed as a result of their having taken the workshop. Amber did not think that her beliefs about teaching children with autism had changed during the five day
workshop. She did report, however, that her perspective had shifted about teaching certain functional skills at school.

I think that the last couple of years I got away from teaching functional skills … like potty training…I thought things should happen at home first. I think the workshop helped me [realize that] it’s just not going to happen at home so I just need to do it at school. It [potty training] will severely impact his placement as he ages. If we don’t do it now it’s not going to get done.

Elizabeth said that her beliefs had not changed so much as they had been refined.

I knew that they [students with autism] saw the world differently but hearing it put in those terms helped me understand. You could say that everyone sees the world differently actually. They [persons with autism] think that you share their perception no matter what. I think that’s how she [one of the workshop instructors] explained it. They don’t see [understand] that other people see things or react differently than they do and they think that everyone has their same perception and they think that you understand why they’re acting that way.

Marie did say that she experienced a change in the area of behavior support.

Yeah, the behavior stuff [removing support]. I think there are times when I have weaned [a student] off an intervention thinking that they could handle it and then looking back thinking, “Mmmm, maybe they couldn’t. Maybe that was a bigger influence than I was thinking it was at the time. … like a support I had implemented and then thought that they didn’t need it so I took it away.”
Alicia explained that her confidence had increased due to her experience in this workshop.

I feel a lot more confident in making schedules and dealing with my para,[paraprofessional]. [Because one of the instructors] kind of gave us the permission to be in charge and that was extremely beneficial…to take charge of your classrooms, of your para’s…I’m very professional…but, I am a very gentle person and sometimes working with my para, I haven’t always been as strong a leader.

Ongoing Professional Development

Because the participants valued continued professional development, each teacher had specific ideas or areas of need where they intended to seek more training. Most of the teachers made comments wanting further training in teaching their students’ in the areas of literacy, math, behavior, social skills, and life skills. Elizabeth believed,

I will probably always be getting kids with autism [on my caseload], more of the higher functioning kids. I’m going to be looking primarily at literacy…math and maybe vocational skills. Behavior [skill training] would help.

Carly said that, “I would really like to learn how to instruct a literacy group for students with autism. That is an area that I personally need help with. I would pay money out of my own pocket to go to that.”

Ellen and Grace both mentioned their desire to learn more about social skills development. Grace stated that, “I think because most of my kids are higher functioning, one of
the things I really want to learn is social skill instruction.” Ellen said, “I would love to get a lot more training in ABA.”

Elizabeth and Amber specifically mentioned their desire to learn more about teaching math skills to students with autism. Amber noticed, “There’s never anything out there on math.” While Elizabeth and Sarah wanted more training on how to teach life skills to high school aged students.

High Functioning Students. Several of the teachers mentioned that they would focus their on-going professional development on addressing the needs of higher functioning students with autism. Marie commented that her goal to learn more about high school aged, higher functioning students was not addressed during the workshop. Maria mentioned,

It’s [the summer intensive workshop] still addressing primary kids and it’s still addressing non-verbal or minimally verbal functioning language. I think some of it [the reason] is that that’s a tricky population [older, higher functioning] because they have all of these autism needs in the field of socialization, lack of engagement, and behavior issues, but we still have to get them to take that regular test. I do feel that that’s the piece that is usually missing.

Composite Structural Description (All Participants)

The participants in this study wanted to effectively meet the academic and social needs of their students with autism. They shared a belief that quality professional development was an essential means to this end. They came to this experience from different backgrounds and with different expectations. Regardless of their varied agendas and where they were on the teaching continuum (Feiman-Nemser, 2001), the participants believed that they had not received proper
training initially from their teacher preparation programs nor eventually from the subsequent professional development programs that they had attended. They each desired a comprehensive education that included current research as to how students with autism learn and the most effective techniques for teaching them. The participants’ motivation for attending this summer intensive workshop was threefold: (a) they wanted to improve their professional practice by replacing ineffective techniques with the information gained; (b) which in turn would measurably advance their students’ outcomes; and (c) by so doing, would cause general educators to re-evaluate their contribution as teachers and thereby be more welcoming of them into the professional community.

**Enhance Professional Practice**

The teachers believed that continued appropriate professional development was required for effective teaching and that there was no end to the need for ongoing training. They were aware that critical information comprising the law, policy, and research was always changing, making it necessary to stay current. Prior to the summer intensive workshop, the participants described feelings of frustration about their limited access to evidence-based practices that support students with autism in educational settings. For most participants, this was having a negative influence in the participants’ classrooms resulting in behavioral problems as well as ineffective use of instruction time. They believed that given the accurate information about best practice for teaching students with autism, they could improve the quality of their instruction and regain classroom control. They explained that they either did not know where to find the information or were unaware that the information even existed.
The participants also had no peer teacher either to observe or to compare their instruction with and, as a result, they had no gauge to measure their own degree of competence (Elliot & Dweck, 2007). They were left to form their own definitions framed within the limitations of their previous experiences as students in general education classrooms (Dewey, 1938). They were eager to be given a description of what these classrooms would look like, and, if possible, some idea of how they would work.

As it happened, during the workshop the participants were given the opportunity to observe a model classroom that used evidence-based practices to teach children with autism. The teachers observed a visual demonstration, in detail, of how to design a classroom including the physical arrangement, visual scheduling, and instructional methods that would best support their students across the autism spectrum. After the class ended, the instructor met with the participants for an extended period in order to answer their follow up questions. Participants found this to be one of the most rewarding and instructive experiences of the workshop. It was obviously beneficial to observe techniques that were both successful and unsuccessful as well as strategies that were implemented differently than had been in their classrooms. They were also made aware of any procedures that they might now be following that were found to be ineffective or detrimental to the progress of students with autism.

**Improve Student Learning**

The participants placed a great deal of value in this workshop, due to the fact that their special education directors, supervisors, or principals had strongly recommended it and had provided the funding as well. This explicit endorsement of the workshop gave the participants high expectations that their individual instructional goals would be met. “I think it’s going to
completely change the way I teach.” Much of this anticipation was due to the fact that the workshop leaders were noted professionals in the community, each credentialed, and experienced in working with children with autism.

Workshop instructors described and demonstrated the most effective evidence-based instructional strategies found to improve student outcomes. This gave the teachers a sense of validation from the research and assurances from professionals in the field, that if they followed this instruction, their students would likely experience improved outcomes.

The participants explained that they were motivated to use the most current research based practices in their classrooms because to do otherwise would not be giving their students every possibility to meet their potential. The participants believed that in order to improve their practice they had to continue to learn and that improving their practice for students with autism served to benefit all students. They believed that the information covered in this workshop would bring about positive improvements in their students’ learning and they were motivated to try.

**Expand Professional Community**

The teachers in this study remarked at the absence of collegial inclusion and particularly mutual respect from both their teaching peers and supervisors. They developed feelings of frustration and insecurity as a result. The first year teachers were met with less than inviting attitudes from some of their general education peers. From these experiences came a sense that some of these teachers were not supportive of inclusion, much of it due to the reported behaviors and reputations of the students that were served in both the general education classroom and the resource room. Elizabeth mentioned her feelings of isolation when she discovered that she was
intentionally not included on assigned faculty collaborative teams. All participants believed that collaboration among teachers was a valuable means to helping students succeed but, on the other hand, less than accommodating attitudes toward inclusion and lack of knowledge about how to best support students with autism, was segregating to both their students and themselves.

Several participants mentioned that their motivation, in part, for attending this workshop was their belief that they could serve as a valuable resource for general educators who have students with autism in their classes. Elizabeth had previously worked with a student on the autism spectrum, who was included in a general education classroom. She explained that the general education teacher tried to teach him effectively but did not understand how to provide appropriate support such as visual cues. Sharing the information they learned in this workshop would improve the general educators’ professional practice as well as their students’ success, including both those with and without autism.

During the workshop, time spent in discussion with fellow teachers alleviated some of the participants’ feelings of isolation by providing a community of commonality, one of shared experiences. Workshop attendees spent time in small groups discussing and practicing the implementation of specific interventions. Participants commented that it provided them an opportunity to offer and receive support from their peers as well as to make contact with fellow teachers and establish relationships for ongoing support.

Once the workshop concluded the participants commented positively on what they learned. Some expressed their amazement at the amount of evidence-based practice available for students with autism. Some were surprised that they had not been exposed to this information previously, either in their teacher preparation programs or in professional development
programs. All of the participants believed that this particular workshop had met many of their professional learning goals. They felt confident that they would be able to implement the information and skills that they learned and that it would improve their practice and their students’ learning. Several participants genuinely hoped that by implementing what they had learned at the workshop, their students’ behaviors and academic performance might noticeably improve so that the faculty at their schools would adopt more inclusive attitudes. Also, as a result of the workshop, some hoped that their peer teachers would recognize the value of their new found knowledge and ask for their input regarding their general education classes. In a more perfect world, this could lead to a joining of special education and general education teachers into a genuine teaching community.

**Essence**

The varied experiences of the participants during the summer intensive workshop merged into common themes, revealing the essence of their shared experiences. Interviews with the participants who attended the workshop clearly established that as teachers they were essentially seeking professional development to improve their teaching competence. Competence is a basic human need from which humans make decisions about their actions both with regard to establishing goals and the methods to meet them (see Elliot & Dweck, 2007). From there, the participants aspired: (a) to improve their professional practice; (b) to maximize student outcomes, and (c) to integrate themselves into a community of their professional peers.

**Improve Professional Practice**

Every participant had either a bachelor’s degree or a master’s degree in special education. These were generalists’ degrees with specialty divisions giving them license to teach students
with either mild to moderate, or moderate to severe disabilities, but not autism specific. When they first decided to become special educators, none of the participants had the intention of teaching students with autism particularly, nor were they sure that they would have students on the spectrum in their classes. Only after they began teaching students with autism and after they had completed their degrees did they become aware that they needed additional training to teach students with autism. At that point, they sought adequate post-graduate professional development. Yet, they encountered difficulty in finding programs that either offered information beyond the basic characteristics of autism or that were appropriate for their students’ academic and social needs complementary with their ages.

This summer intensive workshop was offered by a local university and the instructors each had expertise in the areas of teaching and therapy with persons of all ages across the autism spectrum. The instructors were knowledgeable about the research that supported best practice and, as such, they were able to relate experiences in implementing those methods found most successful for students with autism. Because of this understanding, the participants believed that by completing the workshop they would become better qualified to teach students with autism who were enrolled in their classes.

Many of the participants did not have either a mentor or peer teacher in their schools to observe and with whom to compare their instruction. As a result, they had no gauge as to their own degree of competence (Elliot & Dweck, 2007). Not only did they have limited information about best practice but there was no immediate validation that they were delivering any of these practices with fidelity. They were left to work things out on their own. Without a mentor to offer suggestions or corrections, their only strategy would be to wait for student results to validate
whether their instruction was effective or not. In the long run, students paid the price for their teacher’s lack of professional development and community.

During the workshop, the participants had the opportunity to observe a model instructional program for students on the spectrum and to talk with the teacher of this class. The participants experienced, many for the first time, a visual demonstration of how to design a classroom that best served students across the spectrum. This included how to visually schedule and reinforce the sequence of activities along with aide support. Finally, they had a model, a measure of what competence looked like. This was something that they believed they could replicate in their own classrooms, giving their students the best instruction that research has to offer.

**Maximize Student Outcomes**

The participants believed that improving their instruction through quality professional development would improve their students’ overall quality of life. They realized that their contribution to each student would eventually influence the degree to which they would become functioning members of society. It emphasized that all teachers have a window of time, while the child is in school, to teach the knowledge and skills necessary to become an independent adult. Amber was adamant on this subject, “They need to be independent. School is full of people with disabilities. Life is not. Once they leave here, nobody cares. I mean they might work at a sheltered workshop making 50 cents an hour if we don’t teach them skills at school.” Therefore, the participants believed in the importance of following instructional techniques that have already been proven effective for children with autism and the importance of following them with fidelity to maximize the effects. Just as importantly, teachers needed to fully utilize the
limited time available for the students to master necessary skills for living in meaningful ways. The participants took this as a personal responsibility and wanted to do what they could to improve the students’ chances for success in adulthood.

**Integrate into the Professional Community**

Community refers to a human being’s innate need to socialize and feel a sense of membership within a group (Elliot & Dweck, 2007). Although every participant did not speak specifically about community, most participants mentioned their feelings of isolation due to the absence of a special education community. They spoke of their belief that they would benefit from the support of others who were more experienced than they were (Vygotsky, 1978). And, they mentioned a desire to be respected by their general education peers and considered a resource for improving the effectiveness of inclusion for both the teacher and the student.

**Isolation.** When the participants were in their pre-service programs they had support from peers and an experienced college community. But once they entered the workforce, most participants felt that they did not have a similar special education community to rely upon. Conversely, the general education teachers had a community, thereby leaving the special educators at a disadvantage. Also, they felt a sense of isolation, a feeling of being different from the general education staff as a result of their specialization.

**Support.** Participants believed that their skill in delivering evidence based practice could be enhanced through the assistance of a supportive professional community, which for most participants was missing. Absence of a community meant not having models of best practice to reference. However, just as significantly, it meant working without encouragement and
validation from experienced teachers that would lead to a belief in one’s own competence (Elliot & Dweck, 2007).

**Respect.** Most participants mentioned that the general education teachers that they worked with had little or no training in how to both accommodate instruction and improve the delivery of instruction for their students with autism. Those participants who had observed their students in a general education setting mentioned that the teachers were not differentiating instruction to meet the needs of students with autism who were included in their classrooms. Elizabeth surmised that they were “teaching them the same as everybody else.” The general educators were relying mostly on a verbal style of instruction rather than a visual style which typically benefits students with autism. The participants wanted to share information with the general education teachers about appropriate instructional accommodations and modifications for their students with autism. They hoped that, as a result of attending this summer intensive workshop, their students’ impending improvements would be noticed by the general education teachers and attributed to the individual participants. And as a result, and thereafter, the general education teachers would ask them for advice on how to better serve students with autism who attend their general education classes. They believed that this workshop would better equip them to act as resources for general education teachers in this regard.

Grace explained that she would like to assist the general educators as well as her students by preparing behavioral and instructional protocols that could be followed consistently in every class. Alicia wanted to assist other teachers as a role model or a supervisor and to be considered by them as an expert and having earned their respect. “Teachers [then] could come to [me] and say, ‘Oh, I’m really having trouble with this kid. Can you give me ideas?’” Lucy explained,
“For me, inclusion is very important and people say it can be one of your hardest parts of your job … working with the [general education] teachers.”

Conclusion

Teachers started the workshop with a high degree of anticipation; they had set goals for themselves and focused on their specific students and situations. As a result of their participation in the workshop, not only had they learned how to improve student outcomes, but they also learned what was expected of them in order to demonstrate competence. Now, they could go back to their schools and design their instruction and their classrooms after this model. And, as a result of attending this workshop, the participants had acquired a community of special educators who also taught students with autism, with whom they could seek and reciprocate mentoring on an ongoing basis into the future.

Chapter 5

Discussion

Introduction

The purpose of this study was to add to the literature on the professional development programming needs of special education teachers who serve students with autism. The participants were special education teachers who had a minimum of one student with autism on their case load. Their degree of teaching experience ranged from zero to eleven years, representing a learning continuum of professional development experiences (Feiman-Nemser, 2001). Although they varied in years of teaching experience, at the time of this study the
participants reported that they had little to no experience when they first began teaching students with autism.

This study sought to understand: (a) the participants’ professional preparation to teach students who have ASD, and (b) the common experience gained by the participants during a workshop designed specifically to address best practice for teaching students with ASD. The findings represent the common experiences of special education teachers as to their initial teacher training and their ongoing professional development needs. Importantly, it also expands existing professional development literature specific to teaching students with autism.

**Key Findings**

While addressing the research questions, several common themes emerged from among the participants’ responses such as the experiences that they shared in the areas of: (a) initial teacher preparation; (b) instructional effectiveness; (c) ongoing professional development, and (d) lack of professional community. All teachers who participated in this research believed that they had not been adequately prepared in their pre-service programs to successfully teach students with autism. Regardless of where they were on their learning continuum (Feiman-Nemser, 2001), each teacher stated that they valued on-going professional development and furthermore linked this newly acquired knowledge of evidence based practices to improved student outcomes. In addition, most participants felt that because they were not general education teachers, they were ostracized to a degree from the professional community in their school building. This left them feeling frustrated and increased their levels of stress (Otis-Wilborn, Winn, Griffin, & Kilgore, 2005).
Teacher Preparation. A majority of the participants had little to no experience prior to their initial teacher training with any person who had special needs. Some participants started college with no plans to teach students with special needs and declared majors in areas other than special education (e.g., early childhood, dental hygiene, English). These participants either changed their majors during their undergraduate years or later during their graduate programs, eventually earning degrees in special education. Most participants stated that their teacher preparation programs had not offered any substantial information about teaching students with autism. Prior to their first teaching assignment they had little to no awareness of the research pertaining specifically to teaching students on the spectrum. Once they started teaching students with autism, they began to doubt that their preservice education adequately prepared them and they began to seek professional development opportunities specific to teaching students with autism.

Improved Instruction. Most participants described situations when their students with autism demonstrated excessive and undesirable behaviors not conducive to learning (crying, hitting, running, time off task) and they felt ill equipped to ameliorate these situations. The participants interpreted the students’ behaviors as a result of their own ignorance which led to feelings of frustration and incompetence. They wanted to increase their ability to improve student outcomes by structuring the classroom environment and improving student learning, but they did not have the training to do so. They attempted traditional methods but found them to be unsuccessful. When they sought advice from more experienced educators they found the feedback lacking or ineffective. Their administrators and general education peers had little if any knowledge of dealing with these situations. More importantly they were made to feel responsible for their students’ behaviors. Consequently, they came to believe that they needed additional
training to improve their students’ learning opportunities. There was little, if any, professional development offered at their schools. They were quick to conclude it would be their own responsibility to pursue the needed training.

**Ongoing Professional Development.** Only a few participants reported that their school districts had accepted the responsibility of providing appropriate professional development grounded in research. With few exceptions, the participants were left to seek training on their own, to pay for it themselves and to attend during evenings, weekends or vacations. It was not uncommon for the participants to find that their need for knowledge had surpassed the availability of programming that was adequate to meet their individual learning goals. More often than not, professional development curriculum when offered was at an introductory level and focused on young children with high needs. Many of the participants wanted training appropriate for their students who were older and high functioning. The majority of the participants reported that they had not found adequate advanced courses or support until they attended this specific summer intensive workshop.

The participants understood that education was not a stagnant field, that laws and research continuously shifted the field of education, requiring their on-going adaptation and expansion of knowledge. Likewise, they expressed a personal responsibility for improving their practice by seeking quality professional development. Each of the participants in the summer intensive workshop demonstrated a desire to improve their teaching practices and as a result, their students’ outcomes. They considered quality professional development as an essential means to this end.
When the participants arrived at the summer intensive workshop they each brought a varied collection of knowledge and skill sets which were often splintered due to the fragmented information they had previously received. Because of this disconnected context, they desired a comprehensive education, one that included current information about how students with autism learn and followed by effective techniques for teaching them on an ongoing basis.

The workshop instructors had knowledge and experience with successfully implementing current scientifically based protocols for students with autism. They modeled and explained many of the current evidence based practices for the teachers in attendance. Then, the teachers had the opportunity to practice the intervention and receive feedback in real time. Most of the participants mentioned that they felt encouraged and motivated to take this new information back to their classrooms and incorporate it into their teaching.

They had been eager to see a standard of what their classrooms should look like, the physical arrangement and instructional scheduling that would best support their students across the autism spectrum. They considered their own classrooms to be professional mirrors, of sorts, that revealed their degree of knowledge and expertise to anyone who looked in. They reported that they felt more confident about their ability to reproduce a similar educational environment that would help to improve their practice and with it, student achievement.

**Professional Community.** Most participants in this study reported that they experienced a lack of community which led to feelings of isolation from peers. They felt that there was no one in their schools who were qualified to mentor them in best practice for teaching students with autism. During the summer intensive workshop, the participants accessed a learning
community of teachers, all of whom shared similar successes and frustrations with one another given that they each taught students with autism.

Several participants believed that by improving their practice they could serve as mentors to the general education teachers with regard to including students with autism into their classrooms. And, they hoped that the general education teachers as a result would consider them a valuable resource and include them as a member of their professional community.

**Connections to the Existing Literature and Implications for Practice**

Special education teacher preparation programs historically laid clear categorical divisions in special education departments to provide teachers with training for children with specific disabilities and specialized licenses. Public laws such as The Americans with Disabilities Act (1990) led teacher preparation towards a more general preparation approach. Following the mandates of IDEA (2004) special education focus shifted from characteristics of specific disabilities toward providing all students with disabilities access to the general education curriculum. Given the increasing numbers of children born with autism (Autism Treatment Network, 2010), it is likely that all teachers in the near future will serve students with autism in both special and general education settings.

NCLB (2002) policy mandates that teacher education programs include programming that addresses instructional skills applicable to all children with special needs. As a result, the participants in this study learned to design quality instruction and interventions for all students with disabilities, yet when they applied their skill and knowledge to instruction of their students with autism, they generally experienced undesirable results. They came to believe that crucial
information was missing from their generalist special education training programs and they began to doubt their ability to meet the needs of their students with autism (Mastropieri, 2001).

Findings from this study suggest that teachers in this study believed that their initial training did not prepare them to teach students with autism. This perspective is contrary to what some scholars have suggested about teacher education reform. For example, Brownell and her colleagues (2010) suggest that sound instructional strategies proven effective for all students with disabilities, including students with autism, would eliminate the need for autism specific training. The findings from this study, although somewhat controversial, call for more specific teacher preparation to meet the needs of these students.

Limitations

Limitations of this research project could have influenced the validity of the findings such as: (a) limitations of the analysis method as to participant criteria (b) participants’ willingness to participate in the study, and (c) no follow-up observation or interviews with the teachers in their classrooms during the next school year.

Limitations of Phenomenology. The number of participants for this pilot study was nine, which falls short of the suggested number of 15 in the phenomenology methods design by Moustakas (1994) and does not allow the findings to be generalized. The participants’ years of experience fell within a range from zero to eleven years. This phenomenological study would have been more in accordance with Moustakas’ (1994), and Seidman’s (2006) research design if the participants were more similar in two areas: if the participants’ years of experience was more similar in that they were all within the same phase on the learning continuum (Feiman-Nemser, 2001) and if they had a comparable degree of knowledge with regard to students with autism prior to attending the summer intensive workshop.
However, there was homogeneity for the group in their common experiences of limited preparation to teach children with autism as well as their difficulty finding both quality and appropriate professional development while in-service. Also in common was the isolation and frustration they experienced due to lack of community and mentoring in their workplace compared to the community and support they observed among the general education teachers. Each participant regardless of their differences in experience, valued on-going professional development, believed it had a direct correlation to their own success as professionals and to their students’ quality of life.

**Participant Willingness.** The special education teachers interviewed valued professional development and were very motivated to attend the summer intensive workshop from which they were recruited. The participants were all white females which could have influenced their perspective on teaching in general. Also, their agreement to participate in this study could signify a dedication to ongoing learning and to teaching students with disabilities that might not be typical of all special educators.

**Follow-up.** Although the participants were interviewed during their enrollment in the summer intensive workshop, they were not observed after the course ended implementing the strategies they had learned into their own classrooms. Neither were they interviewed about changes in their instruction, classroom design, or student outcomes as a result of their participation in the summer intensive workshop. Powers (1992) discovered that even though the skill level and attitudes of educators improved following the completion of a special education course, the frequency with which the teachers implemented what they had learned was low. Observations of these teachers in practice could have provided evidence of the pragmatic effect
of the workshop on their long term instructional scheduling and on the basis of student outcomes (Hatch, 2002).

Implications for Future Research

The findings from this study present a glimpse into the pre-service and in-service professional development needs of special education teachers of students with autism. Previous research has presented a plethora of scientifically based intervention strategies for successfully teaching students with autism (National Research Center, 2010) but this study revealed that the information and experiential training is not readily available to practitioners. Although there is a great deal of information about professional development for general educators and special educators with regard to inclusion, there is little information on the influence that appropriate professional development has on improving instruction with regard to students with autism.

This phenomenological study took place over the duration of a summer intensive workshop attended by teachers of students with autism. These same participants continued on to receive instruction and coaching throughout the following 10 month school year as part of their requirement for earning graduate credit with the university that sponsored the summer intensive workshop. Interviewing and observing participants throughout the entire ten month graduate course would allow participants to share their experiences with regard to retention and transference of the information presented. Likewise, continued observations would reveal whether the teachers were able to correctly implement the techniques learned with a high degree of design fidelity. Data on these aspects relative to the teachers’ participation in the entire ten month program, would add valuable information about the program’s effectiveness and additional professional development needs of teachers of students with autism.
The existing research regarding the outcomes of professional development for teachers in the field of autism is limited to the availability of appropriate and thorough professional development programs. We borrow effective professional development programming data from the longstanding research in areas of general education and special education but researchers need to look more specifically at the influence and needs of professional development specifically for students with autism. This data could serve to improve initial preservice preparation and ongoing professional development for teachers of students with autism.

Conclusion

ASD is currently the fastest growing developmental disability in U.S. public schools. The number of children in the Unites States diagnosed with autism is estimated to be one in every 110 (Autism Treatment Network, 2010). Federal mandates under the Individuals with Disabilities Education Improvement Act (IDEA, 2004) require that students with disabilities have access to the general education curriculum including teaching strategies that are supported by empirical evidence (NCLB, 2002). Educators will be expected to provide best practice interventions and to develop the skills necessary to implement these with fidelity. Special educators of students with autism will serve as change agents in many cases to both introduce and advocate for the implementation of EBP into general and special education classrooms.

Teachers of children with autism are a specialized group of educators, who require initial teacher training and ongoing professional development with a focus on EBP for students with autism. Due to this specialization, they may have difficulty finding pertinent professional development including an appropriate learning community that is capable of providing them with support. A similar lack of positive and professional support has been found to influence feelings
of isolation and negative teaching efficacy (Elliot & Dweck, 2007). The summer intensive workshop attended by the participants of this research project, in addition to providing adequate information, skill demonstration, and coaching, also provided a community of teachers who share with one another common experiences of teaching children with autism. This research project has shown that in addition to quality pre-service training, a supportive community and appropriate ongoing professional development is necessary for educators to meet the needs of students across the autism spectrum. The participants, having experienced this professional development program and this community of teachers, have formed for themselves a support group of peers which may assist in improving their instruction and student outcomes. In addition, it has just as importantly reduced their feelings of under preparedness and subsequent feelings of isolation.
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Participant Recruitment: Email

“Hello, my name is Jennifer Wolfe. This email has been sent to you from Dr. Carnahan, on my behalf. Please do not reply to Dr. Carnahan regarding this email. I am writing to you about the professional development course: PRFS 570: Autism Spectrum Disorder that you have enrolled in this summer. I am a doctoral student in the department of Special Education at the University of Cincinnati and will be attending this program for the purpose of doing research for my dissertation. I am sending this email to ask you to participate in my research project. Please read the following paragraphs and contact me via email or phone if you are interested in participating or have any questions. Once you contact me I will email you a copy of the consent form that you would need to sign at our first meeting, should you decide to participate in my research project. If you are interested or would like more information please contact me at jennifer.wolfe@uc.edu, or phone 513-563-7878. Do NOT email a reply to Dr. Carnahan. It is important that your identity and participation in this project be kept confidential. So, please contact me directly. The next few paragraphs explain my project. Thank you for your attention.”

“I am conducting a research study about early career special education teachers’ perceptions of professional development and teaching students with autism. The intention of this study is to expand the knowledge and understanding of how to best prepare teachers for instructing children with autism. It is important that I have input from teachers who are currently working with students with autism. I would like to interview you about your teaching experiences and professional development needs. I am asking you to participate in three interviews. All three interviews will occur this summer: once before or at the beginning of the program, once during the middle of the program and once after the program ends. Each interview will last about 45-60 minutes. We will plan to meet at a time and place that is convenient for you. All interviews will be audio recorded and will be transcribed. Then I will send you a copy to read so that you can check it for accuracy and make additional comments if you want. I will use these transcriptions and your comments as data for my study.

If you agree to participate you must sign the consent form that describes this study and your participation in it. By signing this you are giving me permission to use the information from our interviews and any additional comments you make to the transcriptions to be analyzed as data for my dissertation and any articles I might write using the data.
I will keep your consent forms and all knowledge I have about who is participating confidential. All names on the interview transcript and comments will be replaced with pseudonyms. Copies of the original documents with your names and the consent forms with your names will be kept in a locked cabinet in Dr. Williamson’s office, and no one other than myself will see to them. Your names will not appear on any documents used during analysis. The instructor for this course, Dr. Carnahan will have no knowledge of who is participating in this study.

You will receive no benefit from participating in this project and you will not be penalized in any way for deciding not to participate.

You have the right to withdraw from the study at any time by contacting me or, my advisor Dr. Pamela Williamson. Our contact information is on the consent form and you will receive a copy.

Your decision will be respectfully accepted, no questions asked.

In order to complete this research project I need to recruit a minimum of three (3) participants up to a maximum of twenty-five (25) participants for this study.”

**Participant Recruitment Script: Face-to-Face**

“I am conducting a research study about early career special education teachers’ perceptions of professional development and teaching students with autism. The intention of this study is to expand the knowledge and understanding of how to best prepare teachers for instructing children with autism. It is important that I have input from teachers who are currently working with students with autism. I would like to interview you about your teaching experiences and professional development needs. I am asking you to participate in three interviews. All three interviews will occur this summer: once before or at the beginning of the program, once during the middle of the program and once after the program ends. Each interview will last about 45-60 minutes. We will plan to meet at a time and place that is convenient for you. All interviews will be audio recorded and will be transcribed. Then I will send you a copy to read so that you can check it for accuracy and make additional comments if you want. I will use these transcriptions and your comments as data for my study.

If you agree to participate you must sign the consent form that describes this study and your participation in it. By signing this you are giving me permission to use the information from our interviews and any additional comments you make to the transcriptions to be analyzed as data for my dissertation and any articles I might write using the data.
I will keep your consent forms and all knowledge I have about who is participating confidential. All names on the interview transcript and comments will be replaced with pseudonyms. Copies of the original documents with your names and the consent forms with your names will be kept in a locked cabinet in Dr. Williamson’s office, and no one other than myself will see to them. Your names will not appear on any documents used during analysis. The instructor for this course, Dr. Carnahan will have no knowledge of who is participating in this study.

You will receive no benefit from participating in this project and you will not be penalized in any way for deciding not to participate.

You have the right to withdraw from the study at any time by contacting me or, my advisor Dr. Pamela Williamson. Our contact information is on the consent form and you will receive a copy.

Your decision will be respectfully accepted, no questions asked.

In order to complete this research project I need to recruit a minimum of three (3) participants up to a maximum of twenty-five (25) participants for this study.

Those who are willing to participate please sign the consent form, I will be passing out. Some of you have already signed this consent form and have returned it to me. In that case, you do not need to sign one now. But I do ask that EVERYONE take a form whether you have signed one or not and whether you are interested or not and hand it back to me before you leave the room in order to keep everyone’s decision about participating confidential. Now I will pass out the consent forms and I will read it to you and answer any questions you have before you sign it. Thank you for your attention.”
Title of Study: What are early career special education teachers’ perceptions of professional development and teaching students with autism?

Introduction: You are being asked to take part in a research study. Please read this paper carefully and ask questions about anything that you do not understand.

Who is doing this research study?

The person in charge of this research study is Jennifer C. Wolfe, doctoral candidate of the University of Cincinnati (UC) Department of Special Education. She is being guided in this research by her advisor, Dr. Pamela Williamson.

What is the purpose of this research study?

The purpose of this study is to investigate the experiences of special education teachers with regard to their professional development and teaching students with autism.

Who will be in this research study?

A minimum of 3 to a maximum of 25 people will take part in this study. You may be in this study if you are enrolled in the professional development program: PRFS 570, Autism Spectrum Disorders.

What will you be asked to do in this research study, and how long will it take?

You will be asked to participate in three separate interviews. Each interview will take about 45 minutes to one hour to complete. All three interviews will occur this summer, scheduled at your convenience. The first interview will occur prior to or during the first week of the summer professional development program. The second interview will occur after the first week has concluded. The third interview will occur after the summer professional development program has ended.
Jennifer Wolfe will be conducting all of the interviews and will contact you about scheduling the first interview at a time and place that is convenient for you. During the interviews she will ask you to describe your experiences with people and students who have disabilities, especially autism, and to describe your teacher education and professional development experiences.

It is not expected that you will be exposed to any risk by being in this research study.

You will probably not get any benefit because of being in this study. But, being in this study may help improve teacher training and professional development for teachers of students with autism.

You will not have to pay anything to take part in this study.

You will not be paid for your participation in this research study.

If you do not want to take part in this research study you may simply return this consent form to the researcher without signing it.

**How will your research information be kept confidential?**

The following steps will be taken to ensure that the information about you will be kept private:

At the first interview you will be asked to provide a pseudonym to be used instead of your name during the interviews and on all typed transcriptions. A master list of all participants’ names, pseudonyms and contact information will be kept in a locked cabinet in Dr. Williamson’s UC office. All research data will be kept on a password-protected computer, all paper copies and tape recordings of interviews will be kept in a locked file cabinet in Dr. Williamson’s UC office in a separate location from the master list of participant information. Only Dr. Williamson and Jennifer Wolfe will see the data.

Sometimes confidentiality of email correspondence cannot be assured because of technology limitations. The researcher cannot promise that information sent by the internet or email will be private.

Federal regulations require that signed consent documents must be kept for a minimum of three years after the study is closed. UC recommends that data should be kept for a minimum of two years after the study is closed. After that time all records will be de-identified in a confidential manner by destroying the master list of names and pseudonyms, deleting computerized records and shredding paper research files when the study is complete.

Agents of the University of Cincinnati may inspect study records for audit or quality assurance purposes.

The data from this research study may be published; but you will not be identified by name.
**What are your legal rights in this research study?**

Nothing in this consent form waives any legal rights you may have. This consent form also does not release the investigator, the institution, or its agents from liability for negligence.

**What if you have questions about this research study?** If you have any questions or concerns about this research study, you should contact Jennifer Wolfe at Jennifer.wolfe@uc.edu, or 513-562-7878. Or, you may contact her advisor, Dr. Pamela Williamson at Pamela.williamson@uc.edu, or 513-556-9137.

The UC Institutional Review Board – Social and Behavioral Sciences (IRB-S) reviews all non-medical research projects that involve human participants to be sure the rights and welfare of participants are protected.

If you have questions about your rights as a participant or complaints about the study, you may contact the Chairperson of the UC IRB-S at (513) 558-5784. Or, you may call the UC Research Compliance Hotline at (800) 889-1547, or write to the IRB-S, 300 University Hall, ML 0567, 51 Goodman Drive, Cincinnati, OH 45221-0567, or email the IRB office at irb@ucmail.uc.edu.

NO ONE HAS TO BE IN THIS RESEARCH STUDY. Refusing to take part will NOT cause any penalty or loss of benefits that you would otherwise have.

If you choose to participate, it is important that you understand your right to skip any interview questions that you don't want to answer. Also, you may begin participating in the study and then change your mind and stop AT ANY TIME. To stop being in the study, you should tell Jennifer Wolfe at Jennifer.wolfe@uc.edu, 513-562-7878. Or, you may contact her advisor, Dr. Pamela Williamson at Pamela.williamson@uc.edu, 513-556-9137.

**Agreement:**

I have read this information and have received answers to any questions I asked. I give my consent to participate in this research study. I will receive a copy of this signed and dated consent form to keep.

Participant Name (please print) ______________________________________________

Participant Signature _________________________________________ Date ________

Signature of Person Obtaining Consent _____________________________ Date ________
Questions for 3 Interviews

1st Interview Questions

1. What is your name? Age? Race? Are you male or female? Please tell me a pseudonym that you would like for me to use instead of your legal name, for purposes of confidentiality.

2. I want to discuss the life events that led up to you becoming a teacher. Describe a summary of your childhood, including where were you born, where you grew up, family members, schools, important events, etc.

3. Describe any events or people that influenced your decision to teach children with special needs and/or with autism? Did you know anyone with autism growing up?

4. Where did you go to college as an undergraduate? What was your major?

5. What is your major for your master’s degree? How did you decided on that major? How many credits have you earned toward your masters degree?

6. Describe why you became a teacher of students with autism?

7. Describe any training you have had specific to teaching students with autism?

8. How many total years of teaching experience do you have? How many of those years involved teaching students with autism (ASD)?

9. Now I would like to know more about how you became involved in this professional development program. How did find out about it? Describe how you decided to take it? Who did you talk to about your decision to enroll?

10. What do you hope to learn from taking this training?

11. Think back over the past year or two and describe a teaching experience you have had when you thought that more training would be helpful? Can you describe of another experience?

12. In addition to what you have already shared, describe some of the goals you have set or benefits you believe you will gain from your experience in this training program.

13. What value do you place on professional development in general in your career? What are difficulties that you can think of with regard to your participation in professional development programs?

14. Is there anything else that you would like to add before we conclude our first interview?
2nd Interview Questions

1. Please describe the workshop schedule and your daily routine, and how it has influenced your overall experience.

2. Describe any activities that you have participated in during the workshop that you have found to be beneficial for learning the information…to improving your teaching…to your overall experience.

3. Describe any speakers or other participants involved in the workshop and your interaction with them that has been beneficial:… for learning the information…to improving your teaching…to your overall experience.

4. In the first interview I asked you about any teaching experiences you might have had when you thought that more training in this area would be helpful? (remind them of their answers) How might you apply what you are learning in this workshop to those situations? (Can you think of another?)

5. Describe any new information that you have learned during the workshop that you didn’t know before that is relevant to your current job?

6. Describe any ideas or beliefs about teaching students with autism that you held prior to this training that have changed during your participation in this training.

7. Describe which topics have not been addressed that you believe you still want or need to learn and why are they important to you.

8. What value do you place on professional development in general in your present career? What are difficulties that you can think of with regard to your participation in professional development programs?

9. What value do you place on continued learning in your future career and what plans do you have for future professional development?

10. Is there anything else that you would like to add before we conclude our second interview?
3\textsuperscript{rd} Interview Questions

I’m going to ask you to describe different aspects of your job and how they influence your teaching of students with autism.

1. Do you teach in a school where a majority of the students have special needs or autism? Please describe the community and school where you currently teach.

2. Describe your administrators and support personnel that play a significant role in your daily job. Describe your relationships with them and how they influence your teaching of students with autism.

3. Do you teach in a resource room or in an inclusive environment? Please describe your teaching environment or classroom.

4. Describe your job responsibilities, daily routine, activities, etc.

5. Please describe the students that you have taught in the past year or two who have autism. Please do not use their names. What are their ages and the characteristics (degree) of disability.

6. Describe your relationship with your students and how they influence your teaching.

7. Describe the coworkers that play a significant role in your daily job. Describe your relationships with them, how you interact and how they influence your teaching of students with autism.

8. Describe the parents that play a significant role in your daily job. Describe your relationship with them, how you interact. Describe how these relationships influence your teaching of students with autism.

9. Describe how teaching students with ASD influences your life. What does it mean to you?

10. Is there anything else that you would like to add before we conclude our last interview?
Questions for 2 Interviews

1st Interview Questions

1. What is your name? Age? Race? Gender? Please tell me a pseudonym that you would like for me to use instead of your name, for purposes of confidentiality.

2. I want to discuss the life events that led up to you becoming a teacher. Describe any events or people that influenced your decision to teach children with special needs and/or with autism? Did you know anyone with autism growing up?

3. What was your major for your undergraduate and master’s degrees? How did you decide on that major?

4. Describe why you became a teacher of students with autism?

5. How many total years of teaching experience do you have? How many of those years involved teaching students with autism (ASD)?

6. Describe any training you have had specific to teaching students with autism?

7. Now I would like to know more about how you became involved in this professional development program. How did you find out about it? Describe how you decided to take it?

8. What do you hope to learn from taking this training?

9. Think back over the past year or two and describe any teaching experiences you’ve had when you thought that more training would be helpful? Can you describe another experience?

10. In addition to what you have already shared, describe some of the goals you have set or benefits you believe you will gain from your experience in this training program.

11. What value do you place on professional development in general in your career? What are difficulties that you can think of that might hinder or limit your participation in professional development programs?

12. What value do you place on continued learning in your future career and what plans do you have for future professional development?

13. Is there anything else that you would like to add before we conclude our first interview?
2nd Interview Questions

I’m going to ask you to describe different aspects of your job and how they influence your teaching of students with autism.

1. Do you teach in a school where a majority of the students have special needs or autism? Please describe the community and school where you currently teach.

2. Describe your administrators and support personnel that play a significant role in your daily job. Describe your relationships with them and how they influence your teaching of students with autism.

3. Do you teach in a resource room or in an inclusive environment? Please describe your teaching environment or classroom.

4. Describe your job responsibilities, daily routine, activities, etc.

5. Describe the parents that play a significant role in your daily job. Describe your relationship with them, how you interact. Describe how these relationships influence your teaching of students with autism.

6. Describe your relationship with your students and how they influence your teaching.

7. Describe how teaching students with ASD influences your life. What does teaching students with special needs/autism mean to you?

8. In the first interview I asked you about any teaching experiences you might have had when you thought that more training in this area would be helpful? (remind them of their answers) How might you apply what you are learning in this workshop to those situations? (Can you think of another?)

9. Describe any new information that you have learned during the workshop that you didn’t know before that will be the most helpful in your current job?

10. Describe any ideas or beliefs about teaching students with autism that have changed during your participation in this training.

11. Describe which topics have not been addressed that you believe you still want to learn and why are they important to you.

12. Describe any speakers or any of the activities that you have participated in during the workshop that you have found to be beneficial for learning the information…to improving your teaching…to your overall experience (or other participants).

13. Is there anything else that you would like to add before we conclude this interview?
The following are EBP identified by each of the NPDC, NSP, NAC and their overlap.

<table>
<thead>
<tr>
<th>Established treatments identified by the National Standards Project (NSP) in conjunction with the National Autism Center (NAC).</th>
<th>Established treatments identified by the National Professional Development Center (NPDC) on ASD</th>
<th>Treatments guidelines identified by The National Research Council (NRC).</th>
</tr>
</thead>
</table>

The following 9 treatments were recommended by both the NSP and the NPDC.

**Antecedent Package**  
Antecedent Package Treatments:
- Antecedent-Based Intervention
- Prompting
- Time Delay

**Behavioral Package**  
Behavior Package Treatments:
- Reinforcement
- Task analysis
- Discrete Trial Training
- Functional Behavior Analysis
- Functional Communication Training
- Response Interruption/Redirection
- Differential Reinforcement

**Modeling**  
Modeling Treatments:
- Prompting
- Video Modeling

**Naturalistic Teaching strategies (NTS)**  
Naturalistic Interventions

**Peer Training**  
Peer Mediated Intervention

**Pivotal Response Treatment (PRT)**  
Pivotal Response Training

**Schedules**  
Scheduling Treatments:
- Visual Supports
- Structured Work Systems

**Self-management**  
Self-management

**Story-based Intervention Package**  
Social Narratives

The following treatments were not recommended by both the NSP and the NPDC.

**Comprehensive Behavioral Treatment for Young Children**  
The NPDC on ASD did not review comprehensive treatment
Joint Attention Intervention
The NPDC on ASD considers joint attention to be an outcome rather than an intervention.

Parent Implemented Intervention
Parent Implemented Intervention

Social Skills Training Groups
Social Skills Training Groups

Speech Generating Devices
Speech Generating Devices

Computer Aided Instruction
Computer Aided Instruction

Picture Exchange Communication (PECS)
Picture Exchange Communication (PECS)

Extinction
Extinction

The following procedures were recommended by the NRC.

Early intervention for children immediately upon a diagnosis of autism including participation in a year round program.

Full time intensive instruction.

Placement in a classroom with a low student to teacher ratio of no more than two children with ASD per teacher in a classroom.

All instruction of individual goals should occur in either small group or a 1:1 teacher student ratio.
## Matrix of Participants’ Horizons: Data categorized into common themes.

<table>
<thead>
<tr>
<th>Horizons</th>
<th>Elizabeth</th>
<th>Alicia</th>
<th>Grace</th>
</tr>
</thead>
</table>
| Experiences/Life events that led up to you becoming a teacher. | Summer care of 14 yr old boy with autism  
Volunteer horsetraining therapy | Volunteer and employed to work with children with special education  
Nephew diagnosed with ASD  
Cousin was SPED teacher | Didn’t know anyone with autism or special needs |
| Declaring Major of Special Education          | Started in nursing, wanted to work with children, quit school, returned to teaching, torn between ECE and SPED, decided on SPED | Started as a nurse, exposed to SPED jobs  
through hospital work and education  
Married, raised children then decided to go back for undergrad degree in SPED | Started in dental hygiene and working at Head Start.  
Started BA in Early Childhood, changed major to SPED  
Claims to have been a business decision |
| Licensure                                     | Licensed mild/moderate  
HQT in reading                                                                 | Undergrad SPED w/concentration in developmental handicapped and severe behavior handicapped  
Master’s concentration in reading  
Reading specialist | Undergrad in ECE  
Masters in SPED |
| Teaching Experience                           | Student teaching                                                          | High School resource room – 11 yrs  
Principals: Describe how influences your teaching  
“Definitely my principal, she seems to be my contact person for any information, or problem solving. If we can't figure it out, she'll bring | 1 year Head start  
Two years resource room |
| Current Job Description                       | First year teacher 5 and 6 grade, MD room, mod/intense, one student w/ASD | HS resource room. multiple disabilities.  
Considering a move to social communication classroom next year. | Resource room |
| Principal: Describe how influences your teaching | “The principal is extremely supportive of me. We have a lot of turnover over there. But in the past they have been extremely supportive as well, by the | “I love my principle. We get along great. She's been very supportive of me throughout the school year. Supportive in a way like, ‘I’m here for you but I |
someone in, consultant.” work that I do.” have no idea what to tell you to do.’ She’s pretty much happy with whatever we did. SPED is not her background. She was a classroom teacher.”

“Special Ed Director: Describe how others influence your teaching.”

“This year my main supervisors, the SPED director and the assistant director would probably be most encouraging for this job because they sent me to this workshop.”

“I have a SPED director that doesn't influence my teaching whatsoever (laughter). And when I invited her into my classroom I got, ‘I don't have time to do that.’”

“Other Teachers: Describe how others influence your teaching.”

“It's like an island. I'm not on a team. …they don’t consider trying to include these students. Therefore, they don’t put me on a team with any general education teachers. My kids don’t even have a homeroom.”

“I’ve never been so frustrated. I made it through. I knew it could be a whole lot better. I just didn't know how to do it. That’s really where I was, it could be better than this but how do I get there? Now [after the workshop] I feel like I have tools to get there.”

“Support Personnel: (OT, SLP, PT) Describe how others influence your teaching.”

“Oh, I don’t really know my OT or PT. [First year in the building.] I know they come in together for a whole day. I met the OT yesterday. She's fresh out of college just like me. And she's actually very helpful.”

“My SLP is decent. We got a new one this year. The first year was a nightmare. But this year she was good but not necessarily versed in autism but she was a good SLP.”

“Prior Training for teaching ASD

A ten minute power point about autism at the beginning of student teaching Student teaching w/9 kids w/asd Reading/Writing class, with students with disabilities

“I typically my students in the past have not received any other support personnel. On very rare occasions I think I had one child that had a speech path.”

“Self study and on the job experience Absolutely no formal training in autism School provided one hour PD on the characteristics of autism but not how to teach. Training Specific self-initiated

• Behavior, ABA
• Mental health issues

2 day program by district
<table>
<thead>
<tr>
<th>Value on PD</th>
<th>PD necessary, info always changing Required for effective teaching and use of EBP District supports PD</th>
<th>It’s important to always improve and do the best for your kids.</th>
<th>PD directly influences student outcomes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hindrances for PD</td>
<td>Gets funding from school Getting subs “no one wants to go into my room”</td>
<td>Money, very expensive Finding appropriate info. for HS ASD Time/Energy. If you’re working full time, you’re tired.</td>
<td>• Money • My own kids • Time (Working on masters)</td>
</tr>
<tr>
<td>General Education Teachers</td>
<td>“General Education Teachers have no training.” “Knowledge of ASD would be more helpful to gen ed teachers, to help kids with ASD who are included, they were teaching them (2 students with ASD) the same as everybody else, A lot of verbal.”</td>
<td>“The protocols were extremely helpful. And so would be giving those protocols to the GEN ED teachers to use in class to always know what to do.”</td>
<td>Wants to be a resource for GEN ED teachers and support for included for students with autism who are not on her caseload</td>
</tr>
<tr>
<td>How they found out about this PD and reasons for taking it</td>
<td>“Student teaching mentor teacher told me about it. Mentioned it to SPED director at new job, he had already planned to send me.”</td>
<td>“I called my supervisor and told her I was interested in the new position, a communication classroom, teaching all students with ASD. She asked me if I’d be interested in coming to this workshop. I had no idea about it. I said absolutely.”</td>
<td></td>
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</table>
### Goals for this PD

“Structure will help all students. Structured classroom: physical arrangement, work systems, structured teaching. Consultation to help me reflect on effectiveness of what I’m doing.”

Undergrad work was not enough

Ultimate goal: I want school to send more kids to my classroom instead of a county classroom.”

### What learned from PD?

“I wasn’t expecting Literacy stuff. A small group of us talked to one instructor. I wish there was a whole workshop on literacy. Perception piece: Kids with ASD perceive differently and how that effects teaching.”

“Confidence, I worry a lot that the state is going to come down on me because I didn’t get this much instruction and how am I gonna get to my goals? This actually gives me permission to work on those goals and objectives, collect the data …which I didn’t always collect appropriately. This way it just gives me so much more access to the child. Confidence: She kind of gave us the permission to be in charge and that was extremely beneficial. To take charge of your classrooms, of your para’s.”

### Benefits of this workshop

- Observing classroom
- Talking to teacher observed
- Help with class schedule
- Help with room arrangement

- Observing/Talking to teacher
- Confidence, permission to be in charge (of parapros)
- Schedules and protocols

“I like the way that the three speakers each had their own view and different backgrounds and used their expertise and using their anecdotes.”

“Talking with the classroom teacher as well as fellow teachers in workshop.”
Observing and talking to the experienced classroom teacher

“I really like the classroom schedules, the way they had them set up. I couldn’t visualize it until we actually went in there.”

“Talking to the teacher helped and the examples that she had for schedules, huge help I’m the type of person that really needs an example. So that really helped me a lot.”

Motivation/ Future Plans for Cont. PD

<table>
<thead>
<tr>
<th>Lucy</th>
<th>Marie</th>
<th>Sarah</th>
</tr>
</thead>
<tbody>
<tr>
<td>Experiences/Life events that led up to you becoming a teacher.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dad is a veteran teacher.</td>
<td>Mom is a teacher, uncle deaf.</td>
<td>“I took an interest in teaching when I was in high school, I was interested in early childhood education and I was in a tutoring program and met this student who had autism and that kind of drew me in to becoming a special education teacher.”</td>
</tr>
<tr>
<td>Mom is an occupational therapist and volunteered Cincinnati Recreation Center (CRC). Sports, events for people with wheelchairs. Inclusion in her elementary class. “It made an impact on me, that’s my first real memory and I really enjoyed those kids being in our class.”</td>
<td>Volunteered at Special Olympics and Stepping Stones Worked part time with boy who has autism to teach him ABA techniques. Becoming a teacher of children with ASD was not intentional.</td>
<td></td>
</tr>
<tr>
<td>HS volunteered CRC day camp (2 summers) as inclusion specialist, as a 1:1 aide for 2 kids with ASD.</td>
<td></td>
<td></td>
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<tr>
<td>Declaring Major of Special Education</td>
<td>“I was a psychology major. I was ready to go to school for 8 yrs, then I began classes, and it took me 2 quarters of school to be like, ‘This is</td>
<td>“I initially wanted early childhood education, then I talked a lot to my professors and they thought that special education is a good route to</td>
</tr>
<tr>
<td></td>
<td>Undergrad: mild/mod SPED Master’s: moderate to intense</td>
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</table>
not right for me … I’m going to be a special ed teacher.’ Because I just remembered all that experience and people told me that I did well and I think that was kind of like reinforcing for me.”

<table>
<thead>
<tr>
<th>Licensure</th>
<th>Moderate to severe disabilities</th>
<th>MA soon after BA to get more training on intense disabilities. Took aug/com training. No classes specific to ASD. Learned from outside sources.</th>
<th>Mild to moderate disabilities.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teaching Experience</td>
<td>“My undergrad is in the moderate to severe strand, so … I didn’t know what I was going to find as a first year teacher. I did my student teaching in a MH room with all the gamut of things. I interviewed for this job “Oh we’re starting a new autism unit.” I was like “Oh wow I never thought about the opportunity to teach just autism so I went for another interview and it worked out.”</td>
<td>5 years teaching ASD</td>
<td>Student teaching I worked with fifth and sixth graders. They all had various disabilities. It was a mild to moderate placement … mostly inclusion with a little pull out time for reading support. 1st year: I worked at a charter school my first year…It was just hard for me to pull out the kids to work with them. They had more behavior problems than anything. I was looking for something different. 2nd year: I heard about this job and I have not had too much experience working with students with autism. So I came here for about a week and just observed. I really enjoy it. “This is my first placement where I teach students with autism.”</td>
</tr>
<tr>
<td>Current Job Description</td>
<td>Public school, K-4. It’s an autism unit. They’re starting a new classroom in West, just for kids with autism. Grades 2-4. I think they’re higher functioning. They all have language, well all can speak.</td>
<td>Severe to profound resource room.</td>
<td></td>
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</table>
Principal: Describe how influences your teaching

“I have the most contact with my assistant principal. We do have a great relationship and maybe some fundamentals we differ on. She the assistant principal, she’s an administrator, we have different thought processes. I like her and feel that she has done a lot for me, I feel like something she says I have to… not do, but maybe give more consideration than if someone else said that.”

“My, principal, we have a positive relationship. He… acknowledges that he doesn't truly understand my job, but totally respects my decision-making. So I felt comfortable going to him with questions, ideas, proposals. He trusted my professional judgment. So that allowed me to think outside the box and feel like I could try new things because I knew he supported me.”

Special Ed Director: Describe how others influence your teaching.

“My supervisor is the director of special services. Like I said she is not one of those super friendly...and I thought, “She doesn’t like me.” But, she is just so busy. But then I have found that they will be helpful. If they (administrators) give advice, I do take it to heart and really think about it. Yes they have lots of years of experience, but when it comes down to it, I did go to college to earn this, to be able to have this classroom. I am going to do it how I want to do it. Now if I am doing it completely wrong and someone wants to bring it to my attention, that is completely fine.”

The district special ed director… has walked into my classroom probably three times in five years. Comes to IEP meetings with no background on what we’ve gone through for a year… Which is challenging, because I feel like I don't, I don't have the person who is supposed to special ed. She isn't within reach, which is really frustrating. She knows special ed. She taught special ed before becoming an administrator.

Sarah (Administrators) The coordinator of the Step-Up program she also has her own building on the campus. We meet at least weekly in the morning and we discuss different aspects of the program but she pretty much lets me run my own program and if I need any help I can always go to her.

J: Do you see that as supportive that she lets you run your own program. It’s really actually nice to have the freedom to teach what I want to teach and focus on different skills and their ieps and not to constantly have someone over my shoulder. At public school I was always being watched and it was documentation like crazy and here it’s more relaxed and I can really focus on specific skill sets. I like that.”

Other Teachers: …the other teachers in this building.
Describe how others influence your teaching.

I have gotten such... people have told me that everyone feels sorry for me. I guess a good example would be... all the kids I mean teachers talk about this kid blah, blah, blah. No one has anything nice to say except for a couple of teachers. And what has that done to me? It makes me want to do it even more. I mean it is almost like, this is not probably good, it makes me want to prove to them that he can.

That has influenced how I am going to teach and... Like their negativity, somewhat motivates me. I need to have a good relationship with the general ed teacher and kind of set that up before (school starts).

Support Personnel: (OT, SLP, PT)

(First year teacher.) Always positive... never as collaborative as I would like them to be just because of time restraints The speech path was always helpful especially with programming devices J: do they know much about teaching asd? M: My OT and PT did. My speech ...I was teaching her. She was old school trained to teach kids who stutter. So, I was doing a lot of the facilitating with that. She went to a couple of aug com (augmentative communication) trainings to be able to program the devices but it wasn’t her specialty at all nor was it an interest of hers.”

That’s something that we desperately would benefit from an SLP. We have music therapist comes in for classes and someone who comes here for art but besides that we don’t have anyone at all. Art and music teachers are here once a week. It’s fun and fast not really developmental and gym...no not really
"The OT especially, I felt like her curriculum was totally infused in my classroom. She showed me things and we did them. It wasn’t that we just did them for 20 minutes, twice a week. and she took the time to teach me how to do it, so I felt empowered to know that realm of things. The PT did her best, kids in wheelchairs and that, she taught me stretching and mobility things."

### Prior Training for teaching ASD
- "I never had any classes on autism at Ohio State. They do use the ABA approach in their teaching of all special ed. I’ve never had any actual classes on just autism.
- I worked in a lot of MH classes and there and I recall a kid with autism in those classes."
- "[Summer camp] We did work with schedules, first-then using Pecs and board maker, but it was never explicitly taught to me."
- Not much training ASD. ABA training sophomore year.
- Series of outside PD, mostly didactic and not intensive info.
- Most from outside experiences. Had some consults when teaching.

### In college
- "In college we didn't have any specific classes geared toward autism but it was always addressed as a category of disability. There would be one week when we would focus on it in class, different adaptations and different types of movements going on in school systems, opening more intensive centers."

### Value on PD
- "I put very high value on it. It’s key especially in special education where things are changing rapidly. Especially in autism. I enjoy learning, I always have. And even though I’m very happy to be graduating from college with my bachelor’s degree, I am excited about getting my master’s."
- Value cont learning PD. "PD is very important for teachers because to get better at what you do you have to continue to learn."
- "I’d like to help develop the program and be actively involved in that. I think PD is very important. I’m really happy to be taking this class. I feel like it gives me more credibility as a professional."
Hindrances for PD

Must seek out PD myself. Often school provided PD is not appropriate for sped/asd. District would pay for asd specific PD but subs were problem.

“Money, having to pay for those programs. Also, just not being aware of opportunities. Since I’m not enrolled in a college anymore…I mean I get emails from deans but it’s not specific or something that I’m interested in and in the past at my other school they had mandatory PD days that we had to go to so I was aware of what was out there and I knew that I had to go to it, but now being in this setting, it’s hard to know what’s available.

General Education Teachers

For me inclusion is very important and people say it can be one of your hardest parts of your job and that’s working with the (GEN ED) teachers.”

Works part time as consultant and wants to pass info on to other teachers [gen and sped].

How they found out about this PD and reasons for taking it

during the interview the director of special ed mentioned that she was wanting the person who was hired to attend the autism workshop at UC at the end of July and August.

Found out about PD from colleague who also consults.

“A co-worker at current job took it last summer. I definitely want to further my education and get my masters in autism. My job is paying for three and I'm paying for the extra three.”

Goals for this PD

How to differentiate instruction. …these are higher functioning kids not w/functional skills … and that’s where most of my experience has been. And, professionalism, or work relationships…I wasn’t sure…how much do I want to socialize? How much do I want to keep to myself to stay professional?…, I did not think

M consults in HS and wants more info about standards and assessment, structure for Higher functioning kids in middle and HS.

I would really like to learn about social activities to do with the students especially with my age group (18–21) they've gotten to the point where you can only do so many worksheets you can only do so many academics. I'd like to do more community skills and more social interaction between them I try to do more group activities and also
I'd like to know more about communication devices for non verbal students.

The scheduling and workstations have been so helpful. I feel like it’s geared toward the school setting so I just adapt it. I’ve already taken away so many great things with the scheduling and the work bins so they can work more independently. And the whole theory of mind was really interesting for me like the example [sally story] that they used was helpful for me, that the kids don’t understand that. There were a lot of interesting things that I just wasn’t aware of before.

What learned from PD?
Schedules and work stations. Definitely the dividing up the day and the scheduling and the parts that go into the schedule, like making sure that you have 1:1 time. Wait chairs were a big thing because if you don’t manage your transitions. That’s when you can lose them.

Benefits of this workshop
“The first two days, that Theory of Mind information, I didn’t know that. I never had direct autism classes. I had ABA so a lot of it tied in but I never had it explicitly taught. So, seeing that kind of spelled out helped.”

Presenters varied perspectives, small group discussion
“Leisure time, how it should be scheduled, and we should have a wait area. Because we do have more down time than in a school setting. I need to work on being more structured in leisure time. I really liked the videos that she showed and then we would pick out things that stood out for us and analyze them and then we would discuss it more. Just seeing actual child teacher interaction was really helpful for me. I didn’t think the small group activities were very beneficial for me. I enjoyed everyone’s ideas and I took what I could for my setting [not applicable].”

Observing and
“Seeing classroom was beneficial.”

“I really liked going into the
talking to the experienced classroom teacher classroom. Those rooms were so nice and organized and ideal. It was really nice to see the visual schedule and see how the children actually did it. I had never seen a visual schedule before. Then I got to work with one student with PECS and I had never worked with PECS before. In that class they were everywhere. It blew me away! That was so cool!

### Motivation/ Future Plans for Cont. PD

**Want more training in which areas?**

<table>
<thead>
<tr>
<th>Ellen</th>
<th>Carly</th>
<th>Amber</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Experiences/Life events that led up to you becoming a teacher.</strong></td>
<td>“I didn’t know anyone with autism but my step-brother has special needs. There weren’t the opportunities for inclusion and we had to really push and demand a lot. That’s what got me started.”</td>
<td>“I always played school, always wanted to work with kids, babysat in 6th grade. My mom’s best friend was a teacher. So she would bring her papers over and I would grade them on the weekends. I loved it. I really didn’t know any kids with autism when I was growing up but there was a little boy at church with Down’s Syndrome and we were around him a lot.”</td>
</tr>
<tr>
<td><strong>Declaring Major of Special Education</strong></td>
<td>“I started out in business and quickly realized that I don’t want to be in business and I was thinking about education and I had started volunteering at my brother’s school, and they needed help in the special</td>
<td>“Annie is why I’m a special needs teacher.” “My first cousin Annie has Downs Syndrome. She’s about ten years older than I am and we just grew up with her. She just had an impact on all of our lives. I have 32 first cousins; just on my mom’s side of the family and six of us are special ed teachers.”</td>
</tr>
<tr>
<td></td>
<td>“I went to school to become a regular teacher. And my best friend was teaching in a multiple disabilities unit and I became her instructional assistant. And the first day, I fell in love. I didn’t like the way some of my kids were</td>
<td>“My undergraduate is actually in English, I did not have an education degree. I did an alternate route program and I got certified for gen ed while I was actually teaching gen ed. Then I went back to school</td>
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</tbody>
</table>
ed room and started taking classes in special education.”

being treated and how they were being referred to in the general ed setting at that time. So, I switched my major. I thought about it and day or two and I changed it to special ed and loved it. She had two students with autism in her class and I just thought that was the most amazing thing.”

and got my special ed certificate.”

J: How did you go from special ed to autism?

“That’s where the jobs were.”

Licensure

“I do not have a master’s degree. My undergrad is special education with specialization in MH sped K-12 [grandfathered in].”

“Well, I am certified mild/moderate, moderate/intensive,”

Teaching Experience

“I have 13 years experience, I’d say probably 8 – 9 years I had at least 1 or 2 students with autism. [doesn’t know for sure]. I had kids that I was told had autism but there records said MH or multi-disabilities.”

“In 5 years of teaching I had students with autism every year. I did some student teaching with mild/moderate and that really… just wasn’t me. When I observed in other multiple disability rooms or students with more severe autism I just thought ‘Oh I could do that.’ That’s where I want to be. I just felt like I could make a difference there. And feel like I was being used more than in another setting. So I have only ever taken a job with moderate to intense needs.”

“In NJ I started teaching children with disabilities in 1996 and that’s when things really started to explode in NJ with kids on the spectrum. My first two years I taught regular ed. I taught 5th grade in a large inner city school. Then my husband got transferred from working in Manhattan to more Central Jersey. I couldn’t get a regular ed job in that area and I really always liked special needs kids so I went back to school for that.”

J: Were you seeking job autism?

“No. It was really an opportunity. It was hard to get jobs in NJ. I had my special ed certificate and I offered me a job as an ed assistant [in their summer program]… and that was my first experience with kids on the spectrum.”
Current Job Description

“I teach in a public school. The students that I have, two are diagnosed with autism, two with multiple disabilities and one diagnosed as having cognitive disabilities along with speech. I have a two classroom suite along with a sensory room that is attached onto my classroom, as well as a resource room, restroom that is equipped for changing students that wear depends.

Public school, grades preschool - 5, “It’s a Title I school - 70% free/reduced lunch.
“I have 8 students, 5 autistic. Resource room all students included for specials and some go out for some class inclusion besides specials. All spend majority of the day in resource room.”

Public school, resource room. “Six students, all diagnosed with autism. If you do not have a medical diagnosis of autism you will not be in my classroom. Age range 5 to 11 years old.”

Principal: Describe how influences your teaching

“Well at this point, for the majority of my students the principal knows the kids and comes to the IEP meetings, very helpful, very supportive.”

“When I got here this was a brand new unit. My principal pretty much told me “Just keep them quiet and don’t let them run and you’re doing your job.” I had no clue.”

“Our assistant principal has a lot of influence on how we teach. We just got a new assistant principal this year who worked in special education. She kind of gets it. She gets that functional skills is curriculum which’s really nice. And needing to be taught longer group instruction. That Special ed is not necessarily sitting at a table for half of a day doing one on one direct instruction, which is really nice. My last administrator thought very much that working one on one was all special ed was. It was a huge, huge problem. I think it was detrimental to student outcomes.”

Special Ed Director: Describe how others influence your teaching.

The Special Ed director, to my knowledge, she has never been in my classroom. We have a new special ed coordinator I think she started maybe
two weeks ago. She came in one afternoon and gave me some helpful advice that worked for a few days with one of my students who has autism.

Our former special ed director, he would just shake his head and say “I’m sorry Amanda I feel bad for you. If you could just make it through the year.” I’m going to have the same students for several years. Making it through the year isn’t going to help me because these same students are going to come back to me in the fall.

Other Teachers:
Describe how others influence your teaching.

Support Personnel:
(OT, SLP, PT)
Describe how others influence your teaching.

The SLP and OT we have good ones, there’s no support in the classroom and there’s really no time to collaborate which I’m really sad about because I’d love for them to come in. I’m just going to pursue it and be a nag and keep asking. I’m hoping that when they do come into my room they will see that they can do therapy in here [instead of always pulling out] because my room will be so structured that they

Some of them do pull out. The one that I have right now does pull out. Some of my kids are just starting with them in terms of vocabulary and how to find it on their device. The OT likes to do more group activities. So they both have different philosophies but they do mesh well with the class. We have had a lot of success.
[the kids] won’t have to leave for those services.

One of my struggles last year was, I had all of this training but no support. And I am only one person.

Prior Training for teaching ASD

“When I was in college they taught us how to teach daily living skills. You didn’t have to take reading methods or math methods, those core things. I feel very blessed that my district is paying for me to go to this [summer intensive workshop] because I didn’t feel like I was always giving the kids what they needed.”

“I started out five years ago, it was a brand new unit and I had no training. In my undergraduate I took a generic class like, “Here is every disability you could possibly encounter and I’m going to tell you in 16 weeks.” Then I had an SBH and an LD class but there was no autism specific content in my undergrad. So I went into my first class with having no clue because my student teaching was all mild/moderate.”

“I did not have enough training which is one of the reasons I took that summer job [to get more training] …and they were wonderful, wonderful teachers there who spent all sorts of time explaining to me what I needed to do to help support these kids. And they paid for me to go to the Eden Institute for children with autism in Princeton, NJ. They run strict ABA programs Then I was hired at a public school and I did the autism unit for the preschool for 6 years.”

Value on PD

“I’m so intrigued I just want to learn more because like they said yesterday, that everything that you learn, what works for your students with autism really does work best for all of my students.”

“I think professional development is absolutely key. I think best practice changes so much and as teachers you can get stuck in a rut and keep doing it because its they way it’s always been done because change is hard.”

“I think [PD] it’s very important and I’m constantly going back. I just finished my master’s degree last summer. Special ed. I did that at Xavier. I think I have added 8 graduate credits over the school year. Now this will be three more that I’m doing. I think it’s important to keep current. There’s always new info out there and you have to keep
“It’s overwhelming. but those of us who truly want what’s best for our kids, have to continue doing professional development. Because, there’s always something new, always something better than this. Not that you have to implement everything that you hear, but I think that hearing it and having that knowledge… because you might be working with Joey over here one day and remember something that you heard.”

current. The law is always changing and IDEA is always evolving and people are coming up with new things. It’s just important to stay plugged in to that academic community.

Hindrances for PD

“Getting subs. No one wants to sub in my room.”

“Things that would hinder it are, financially, and right now it’s just hard to pay out of pocket for any kind of professional development, and in our district were not passing levies. So, there isn’t that professional development money to send you places. Money is a limitation. So, family, money, time I guess would be a hindrance but it is key.”

“Time. Just time. Juggling family Yes, and the other thing is that I have been doing this for awhile and everything seems to be for people who are just starting out. If I hear “Autism is a neurobiological disorder…” I’m going to scream! financial. Is that a hindrance? No, my district is very good about paying for things. And, luckily, I’m at a point in my life where I can pay for it and be reimbursed.

J: So, Your district reimburses you? Oh yes. They’re paying for this entire course. I didn't even have to pay anything out of pocket. I was amazed. I'm very fortunate I always worked… I’ve worked at a number of schools and have always worked in very wealthy districts.”
“They keep on saying how much structure the kids need and how to implement the structure and the support. I think a lot of the general ed teachers and some of the special ed teachers think that were doing too much. I think that I’ve even had that thought. Why are we doing all of this? It’s a lot of work it seems like, then you’re going to have to start pulling it back and they’re going to get dependent. But, they do really need that support. She said it best yesterday. The kids are going to look different, if you don’t give them the supports. They’re not gonna be successful. My own personal view on that is why aren’t we doing everything we can to make them successful? So what if it’s 50 thousand supports? So my thinking has really changed. From my own teaching experience, I’ve seen how the structure works. We talked about how the days that are less structured for whatever reason, the behaviors increase.”

“I think it’s not difficult to do in a resource room and certainly not difficult to do in 1 on 1 teaching environment. But, I think once you’ve got them in a classroom, the child has to know how to use that [aug com] device.”

SUPPORT GEN ED I: Is that a problem with gen ed teachers?
“IT’s not that they don’t want to. It’s just if they don’t know how.”

We (school district) consult with the women that are running this training. They consult in M---town. And our district is moving toward this model for all classrooms. My supervisor said “This is what we want. We want a model classroom that’s got it all in place. You guys function as a team as a family. We want to start with you.”

“My director emailed all of the lab teachers with the information. So I read through it and it sounded very interesting and I know two of the instructors. They both come out to my classroom. I just absolutely love them. I think they’re both so knowledgeable and so good at doing two things that I think teachers in my job have trouble
So my supervisor said there’s this intense training and it’s going to be a lot of work for you. She sent me to go look at the social communication unit and said “This is what its going to be like this is what we’re working toward.” And said, “Are you interested?” And I said, well yeah.”

“**Goals for this PD**

**VALIDATION:** “WE have a lot of structures in place, visual schedules and drawers but I’d like to make it all fit tighter. How can we handle it when I need to be in two places Like the situations where we’re waiting an hour for a parent to come because their child is having significant seizure activity because one child is having a medical issues and the kids with autism is having a meltdown because the schedule got changed. Maybe this is just the way it is, but if it doesn’t have to be this way, is there is something out there that I don’t know about?”

**AUG COM:** “So, I was looking for just kind of getting refocused and also augmentative communication devises. There was a huge mention about that in the brochure. I think I’m pretty good at getting kids to use their aug comm devices in my classroom. I’m looking for how can we tie those in and make them true functional communication system in the environment and at home and in the classroom and in the community.”

**Collaboration:** “Just talking to other people who do what I do.”

“**What learned from PD?**

“I got so many ideas that I was writing in my notebook and I was afraid they would think I wasn’t paying attention. I was making notes and thinking to myself, “Oh my gosh I’ve been doing that for the last 3 years with my student and she says that’s something that you definitely don’t want to do with kids with autism.”

“I had been exposed to a few of these ideas before, but I needed them elaborated, or me being stubborn probably needed a why to get it. This is probably the best thing I’ve ever done. There was so much information and it was all applicable to my teaching. I really am overwhelmed and I don’t know where to start. It was excellent information with excellent resources with.”

“This is a first training that I’ve been to with C---, that we even touched on the whole “working with other adults” and how that’s a huge part of your job. It’s really a dance that you need to do. And it’s a huge part of your job to know how to do that dance. Whether it's your OT or your PT, or your speech
 Benefits of this workshop

“What I found was that I was kind of using a form of ABA only it was something that I had just kinda figured out on my own. Model it, have them do it, give them verbal praise, that type of thing. I have been able to a certain extent, to fade giving the constant verbal reinforcement…be able to give the reinforcement toward the end, because it was just taking up so much of our time.”

“The best training I’ve had, was with C- , they came in and did it. They gave us this paper that said this is what you need to do, here is your timeline These are the resources that you need to do it. Based on this section, What is your goal? What is your timeline and what are the resources you need? There were three. When I came back to my room with that piece of paper. I laid it down. They (consultants) came in then and followed up to see where you were with your goals.”

“Refocused. Absolutely. I think that the last couple of years I got away from teaching functional skills … like potty training …I thought things should happen at home first. I think the workshop helped me. It’s just not going to happen at home so I just need to do it at school.”

“I liked the small group discussions. You got more giving and taking from
your peers...kind of have that community [with peers]. It makes you realize, ‘Wow there are other teachers do this.’ You get different perspectives…”

And getting to see the classrooms in action that was great.

Observing and talking to the experienced classroom teacher

Motivation/
Future Plans for Cont. PD
Want more training in which areas?

“I would love to get a lot more training in ABA.”

“Math. There’s never anything out there on math.”

“Sitting in the class and observing (lecture) the first 2 days, I found very difficult. It could be just because I had already had a lot of it. There just was not that rapport, the first 2 days, it was just straight lecture.”

“Managing communication I think is huge because technology has come such a long way.”

Note. ASD = Autism Spectrum Disorder; EA = Educator Assistant; ECE = Early Childhood Education; HFA = High Functioning Autism; HQT = HighlyQualified Teacher; MH = Multi-handicapped; SPED = Special Education; GEN ED = General Education