How Ohio Adult Literacy Instructors View Themselves as Adult Learners Within Professional Development: Learning Style and Motivation Assessment in the Negotiation for Activity Selection

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HOW OHIO ADULT LITERACY INSTRUCTORS VIEW THEMSELVES AS ADULT LEARNERS WITHIN PROFESSIONAL DEVELOPMENT: LEARNING STYLE AND MOTIVATION ASSESSMENT IN THE NEGOTIATION FOR ACTIVITY SELECTION

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This dissertation is dedicated to my great-grandmother Savannah Favors. She taught herself how to read while raising four children. She is my greatest inspiration.
ACKNOWLEDGEMENT

I would like to express my highest appreciation to my Lord and Savior Jesus Christ for strength, courage, and patience. In addition, I would like to extend the warmest expression of gratitude to my parents, Calvin and Malissa Kennedy, and my son, Isaiah, for their encouragement, support, prayers, and love. Thank you for believing in me and providing a positive example to admire. “You’re the wind beneath my wings.” I am also thankful to my family, church family and best friends: Conida Hawk, Rebecca Walker, Tiffany Merritt, Davida Vassar-Moore, Patrice Elder, Malikah Hart, Lacreeta Incorvia, and Dr. Carmine Stewart. They have been my greatest cheerleaders who have helped me continue the journey with their love, laughter, affirmation, and sisterhood.

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HOW OHIO ADULT LITERACY INSTRUCTORS VIEW THEMSELVES AS ADULT LEARNERS WITHIN PROFESSIONAL DEVELOPMENT: LEARNING STYLE AND MOTIVATION ASSESSMENT IN THE NEGOTIATION FOR ACTIVITY SELECTION

ROSARY-JOYCE MELONIE KENNEDY

ABSTRACT

The purpose of this study was to examine the role of the Adult Basic Literacy Education/Adult Basic Education and Literacy educators as adult learners and participants in professional development and continuing professional education, their motivation for participation, and the types of activities in which they engaged. The sample consisted of eighty adult literacy instructors who taught in various educational and institutional settings. This mixed method research design included questionnaires and semi-structured interviews to collect data. This study revealed that Adult Basic Literacy Education/Adult Basic Education and Literacy teachers were aware of their various learning styles, acknowledged the benefit of using learning styles to inform professional development program construction, and were primarily motivated to help their students without the additional incentive of receiving a stipend or being coerced to attend professional development. Instructors in this study believed there were improvements that could be made to the professional development and continuing professional education system for ABLE/ABEL teachers to better serve and help their students. Instructors also advised that time spent in the classroom was a significant form of currency that needed consideration before deciding which activities would be chosen for engagement.
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CHAPTER I
INTRODUCTION

Adult education programs in the United States provide services for over 2 million learners, with a myriad of educational and occupational goals and objectives (Patterson & Mellard, 2007). Adult education has also been one of the most expeditiously expanding fields within education in the United States (Birkenholz, 1999) due to technological advancements, the changing workforce, and adults’ internal motivation to improve life. Adult Basic Education and Literacy (ABEL), or Adult Basic Literacy Education (ABLE) in Ohio, is an area that includes services provided for individuals seeking to improve basic literacy, learn or improve English (English for Speakers of other Languages/ESOL), and those who are preparing for the General Educational Development exam. The National Adult Literacy Study (1993) defined ABEL/ABLE programs as those designed “to address the educational needs of adults who are poor, unemployed or malnourished (and) are expected to become increasingly important in the total scope of adult education” (Birkenholz, 1999, p.8). ABEL is also an area within adult education that reflects the effects of how students’ learning has been experienced,
perceived and categorized. ABEL/ABLE has involved the vested interest of educators, administrators, policy makers, and program planners who shape the scope of the learning environment.

Students serviced by ABEL face many obstacles and challenges to participate in educational programs. Three categories of barriers to engagement include personal, institutional, and lack of professional experience. There are many personal barriers that students encounter that make it difficult for students to initiate or continue participation in adult education programs. The factors span a continuum that includes but is not limited to: geographic location of residence juxtaposed with locale of class site, transportation, educational duties versus family obligations, work/school/family schedule conflict, lack of fiscal resources, or “general fear of returning to school” (Ritt, 2008, p. 12). Institutional barriers, though often designated outside of the student’s control, often pose as “limits that reduce access to adult students and may result in diminished interest or delay in degree completion” (Ritt, 2008, p. 14). Although these challenges persist, many adult students later decide to participate in adult basic literacy education programs to improve basic skills and/or earn a GED credential in order to pursue post-secondary education and career options.

Adult basic literacy education is a field that is defined by various concepts and definitions. The National Literacy Act, 1991 poses the following: “individuals’ ability to read, write, and speak in English, and compute and solve problems at levels of proficiency necessary to function on the job and in society, to achieve one’s goals, and develop one’s knowledge and potential.” Literacy may also be defined as “the desire to read and use literacy; skills and abilities to recognize, understand, and interact with print;
knowledge about reading and how to gain ideas from written word; ability to learn from others while using written word” (Baumann & Duffy, 1997). In addition to the view of literacy being a skill set, it may also be classified as a set of values as defined by cultural and familial contexts (Brizius & Foster, 1987).

“Early in the 20th Century people were considered literate if they completed a certain grade in school or could sign their name” (Padak & Bardine, 2004, p.126), which contradict various multifaceted definitions in today’s modern society. Brizius and Foster (1987) assert that there are cultural, social, and economic implications that impact literacy and its ever-evolving continuum. In addition, there are political repercussions that involve a reciprocal relationship between the literacy field and policy makers that construct guidelines, strategies, and mandates that impact programs. “These definitions of literacy can be arrayed in an order ranging from the most exacting to the least exacting” (Brizius & Foster, 1987), juxtaposed with, but not limited to: ability to read, number of years in schooling, English language proficiency, definitions of conventional and functional literacy, which range from reading ability for self-sufficiency and gratification to reading ability to meet the school and educational program mandates.

Despite varying definitions and external conceptualizations of the literacy field, many adults enroll in various programs to improve their basic skills and various forms of literacy, such as Reading, Writing, and Math, or to augment their academic capabilities to attain a General Education Development (GED) diploma. In 2003, the National Assessment of Adult Literacy reported that 43% of adults functioned at or below the Third Grade, equated with the Adult Basic Education Beginning Basic level. For the fiscal year 2007 in Ohio alone, over 47,000 students were enrolled in Adult Basic
Literacy Education programs (Ohio Department of Education, 2009). Before enrollment, future program participants engage in the assessment process where their skills and abilities are examined and reported according to K-12 grade levels (Askov, 2000). Skills evaluation is important, “because adults usually come to ABE programs with large gaps in their mastery of skills” (Askov, Van Horn, & Carman, 1997). This process is necessary to identify academic strengths and weaknesses. However, this does not account for the prior experiences and knowledge adult learners bring to the learning environment.

In Adult Basic Literacy Education, students are assessed to test their grade level equivalent standards and scale score benchmarks for each Educational Functioning Level (EFL), the federally mandated levels used to determine student performance in basic reading, writing, and numeracy. This has been established through the NRS, the National Reporting System, which requires each state to create a system to track student data. The Adult Basic Education (ABE) Beginning Literacy level is from 0-1.9. The ABE Beginning Basic Education level is from 2.0 to 3.9, from beginning second grade to the end of third grade. ABE Intermediate levels are from 4.0-5.9 and 6.0-8.9 respectively. Adult Secondary Education levels range from 9.0 to 12.9 respectively. The Test of Adult Basic Education (TABE) is an authorized standard assessment, used both in program orientation sessions and in the classroom to assess students’ educational functioning level by grade level. This test is facilitated to identify where students’ academic levels begin, track growth and progress, and also how to analyze and determine GED test readiness. The 12.9 level is the maximum level that a student attain, which is equated to the twelfth grade year, ninth month of academic instruction.
In order to progress students from minimum performance levels to maximum levels, direct and individualized instruction is utilized to prepare pupils for test-taking for both the TABE and GED. This requires the teacher or facilitator to provide an environment conducive to learning, giving students the skills that enable them to access information, bridge prior and new knowledge, and take accountability for their education. Conti (1985) argues that the teacher is an essential part of this process, also helping to foster and cultivate an affirmative student-teacher relationship, which enables the student to become better equipped for problem-solving and interpersonal relationships. It is assumed by adult basic literacy education program directors and those responsible for hiring faculty that instructors possess the content and methodological delivery knowledge to aid this process. There are also state defined standards that instructors are advised to adhere to in an effort to properly execute the goals and objectives of the program and to meet student educational and future occupational needs.

Currently, in the state of Ohio, adult literacy programs are under the authority of the Ohio Board of Regents, which require instructors to expand their repository of current methodological approaches to reflect modes of instruction more likened to the post-secondary arena (www.ode.oh.us.org). State-funded programs use the Ohio Performance Accountability System (OPAS), as a reference manual, and as a tool for program management. This substantiates how adult basic literacy education programs provide services, maintain accountability, by defining how students should be registered, assessed, evaluated, and exited out of the program. The OPAS manual also provides guidance for instructors for lesson planning, carrying out curriculum and instruction, and helping students determine goals.
According to the Ohio Performance Accountability System Manual for Adult Basic Literacy Education instructors, “Instruction is the ‘practice’ part of curriculum” (Ohio Department of Education, 2008, p. 6.5). It further emphasizes and encourages teachers to “utilize various methods and materials to meet the diverse learning needs of adult students, present instruction to adult students in meaningful contexts”, and to “utilize teaching practices that have proven to be effective in helping students learn” (Ohio Department of Education, 2008, p. 6.5).

Currently, as a result of Ohio House Bill 119, the Ohio Board of Regents (OBR) is currently responsible for the governance, monitoring, and tracking accountability for adult education programs within the state of Ohio. They are also responsible for ensuring ABLE programs establish and maintain an accountability system for their programs in general and staff more specifically. This encompasses Career and Technical programs, General Education Development (GED) preparation classes, and Adult Basic Literacy Education (ABLE) programs in an effort to transition students into pursuits of post-secondary matriculation and completion and/or acquisition of stable, gainful employment. The Ohio Board of Regents’ stated objective is to provide “quality leadership for the establishment, improvement and expansion of lifelong learning opportunities for adults in their family, community and work roles” (Ohio Department of Education, 2009). In addition, the Board of Regents’ goals are to maintain programs that facilitate, tract, and promote students’ progress, as well as transition students to college and employment via improved instruction and support service provisions.

Improving the quality of instruction is a stated objective noted by the Ohio Board of Regents. Instructional practices vary in an adult literacy classrooms (Beder,
Lipnevich, & Robinson-Geller, 2007), with a low return on the investment towards meeting state mandates by demonstrating student progress. In addition, adult educators are also required to model their instructional methodologies juxtaposed with post-secondary instruction to expose and engage their students in these teaching archetypes. Despite improved availability of teacher resources, instructional methodologies, and preparedness, teachers are also faced with added dilemmas of helping unequipped students to adapt to the learning environment (Boyd & Martin, 1984) and the workplace. “The cost of addressing the issue of adult literacy is great, but the consequences of ignoring the needs of millions of Americans for improved basic skills are even greater” (Brizius & Foster, 1987, p.3).

Adult basic literacy instructors are an important element in addressing the educational as well as personal and future professional needs of their respective students. ABLE educators function in various roles including teacher, ABLE program stakeholders, constituents of the ABLE field, and adult learners (Smith & Hofer, 2003) who also require educational development for professional fulfillment and enhancement to better hone their craft. Thus the impetus for instituting and maintaining continuing education via professional development is imperative to aid in teacher effectiveness. In addition, knowing how teachers learn is essential to inform how continuing education and professional develop programs are created, provided, and improved. Furthermore, what is required is an empirical understanding of the effectiveness of these programs on teachers and why they choose specific types of continuing education and professional development program activities, because the extent and outcome of teacher learning
ultimately impacts both teachers and students (Desimone, 2009), students’ retention, and thus, their respective ABLE/GED programs.

**Statement of the Problem**

Opportunities for professional growth, learning and development, in addition to learning contexts and learning styles’ profiles are well accounted for in the literature for elementary and secondary school educators (Ross 2001). However, empirical studies are less representative for professionals who are Adult Basic Literacy Education instructors. More research-based knowledge regarding learning styles’ profiles and how learning styles are used to negotiate choices of learning activities in continuing professional education and professional development has a two-tiered benefit: to better understand Adult Basic Literacy Education instructors as learners in an effort to aid in informing professional development and continuing professional education program scope and structure.

Continuing professional education is a learning cauldron by which academic, professional and personal growth of an adult learner may be fostered in a particular situated context. Individuals pursue these routes of edification for a myriad of reasons that span a continuum, from personal interests, professional accreditation, to employment mandates. Professional development and continuing professional education as educational entities enable individuals to attain information to hone knowledge and skills that benefit the individual learner, a community of learners, and program/service beneficiaries. Professional development and continuing professional education also provide program participants with opportunities to reform preconceived notions and attitudes regarding a myriad of issues that professionals encounter in their occupations.
Professional development is an effective tool to facilitate a learning process for instructors, in an effort to positively impact student and teacher learning outcomes (Van Keer, Verhaeghe, 2005). “Good teaching requires both professional competence and personal connection” (Shoffner, 2008, p. 784). Thus, professional development may be viewed as both a context in which learning outcomes may be accomplished and a means that may be used by an instructor to transfer learning to their students.

However, continuing education via professional development is “neither a guarantee of competence nor the sole answer to competence assurance” (Queeney, 2000, p.375). Likewise it does not necessitate that instructors will utilize all of the components learned in their coursework. Nowlen (1988), as cited by Daley, notes: “We know that many professionals attend CPE only to shelve the large handouts and course materials they receive, never to look at them again”. Adult Basic Educators also face additional barriers to participation in professional development and continuing education, contrary to their K-12 counterparts, which include schedule status (part-time), seclusion from professional peers and colleagues, and lack of fiscal resources to support participation (Smith & Hofer, 2003).

The structure and scope of professional development can also pose a problematic circumstance. Often professional development focuses on the “what (rather) than the how of staff development” (Randi & Zeichner, 2004, p. 181), which often leads to exclusionary focus on promoting specific content or curriculum opposed to the holistic development of the professional. In addition, it may also lend itself to a dictatorial perspective or environment for instructors without providing “opportunities for self-
exploration, learning, and growth …limiting teachers’ access to knowledge, no matter where they teach” (Randi & Zeichner, 2004, p. 181).

Despite the possible disconnect between program goals, learner goals and expectations, environment factors that impede the process of employing tenets learned, and the nature of the ABLE teachers’ profession, the “bottom line of continuing education is to improve the practice of these teachers” (Cevero, 2000, p.3) and professionals in other occupations. Furthermore, strengthening teacher knowledge and skills is pertinent to providing a transfer of knowledge for students or program participants to positively affect their learning gains (Veenman, Van Tulder, & Voeten, 1994). Though research has emphasized and spotlighted the importance and impact of professional development for K-12 teachers, their motivation for and participation in various types of activities, and the corresponding impact on students, there is little empirical evidence to assert evidence of the same positive impacts for Adult Basic Literacy Education instructors. In addition, because of state governance mandates and implications of teacher participation in PD/CE, more research is needed to identify the learning styles of Adult Basic Literacy Education instructors, how they negotiate learning activity choices based on these modalities, and the type of initiatives that are taken to pursue and engage in these opportunities.

**Purpose**

The purpose of this study was to examine the role of the ABLE educator as an adult learner in the reflective practitioner process as a participant in professional development and continuing professional education. This investigation was governed and guided by the following research questions:
1. What are the preferred learning styles of ABLE teachers?

2. Is there a relationship between ABLE teachers’ preferred learning styles and the types of continuing professional education learning activities in which they participate?

3. What are the motivating factors that drive ABLE teachers to participate in continuing professional education?

4. Is there a relationship between ABLE teachers’ characteristics and their participation in continuing professional education?

**Significance of the Study**

Evaluating and understanding perspectives on professional development for Adult Basic Literacy educators has empirical additive benefits which may further influence and improve continuing education programs servicing those adult learners who also service and serve as role models for low literacy learners. Identifying and employing educator input also benefits the program planning and execution process for developing training programs.

It was important to garner teacher input regarding how they view themselves before initiating continuing education, professional development, and training. Knowledge about teachers on both a personal and professional level enable educators to investigate and determine needs, reevaluate objectives, and construct occupational goals. Furthermore, this information could provide a compass for program planners, guiding how continuing education and professional development is structured. Therefore, it was even more imperative to recognize, understand, and empirically capture data regarding
how educators view themselves as adult learners prior to selecting and engaging in professional development to provide a substantial foundation to improve programming, involve instructors in a more in depth analysis of self, and add to the body of research about teachers within the Adult Basic Education and Literacy/Adult Basic Literacy Education field.
Limitations

This study possessed limitations. The participants that were selected were ABEL instructors that teach solely within the state of Ohio. Educators included those who work with students who seek to improve skills in reading, writing, and math, English language acquisition and those that pursue taking the GED test. Teacher-participant self-reports on their beliefs were also a limitation due to the subjectivity of their input.
Definitions

ABLE: Adult Basic Literacy Education: an area within adult basic education in the state of Ohio designed and defined to serve students ages sixteen and older who do not have a high school diploma, by providing basic skills remediation in reading, math, and language, Adult Secondary Education/GED preparation, English for Speakers of Other Languages (ESOL), Family Literacy, Computer Literacy, and Workplace Literacy

ABEL: Adult Basic Education and Literacy: an area within adult basic education, designed and defined to serve students ages sixteen and older who do not have a high school diploma

Continuing Professional Education: utilizing a variety of educational methods within various institutions and mediums to accomplish occupational and professional goals

Professional Development: a course of study that enables a professional to stay abreast of current theories and practices within their respective occupations

GED: General Educational Development: the examination that issues a high school equivalency diploma, awarded to examinees who successfully complete the five subject areas of the test including reading, writing, social studies, science, and mathematics

Learning Styles: modalities that defines how an individual learns

Teaching Styles: modalities or category that describes how an instructor teaches or conveys ideas in the classroom

OPAS: Ohio Performance Accountability System; The accountability system that guides adult basic literacy education programs on overall management, student assessment, teacher instruction, and progressing students across grade levels
CHAPTER II

REVIEW OF LITERATURE

Facets of Adult Learning

According to Merriam and Cafarella, “we all carry around with us our own individualized set of schemata that reflects both our experiences and our worldview” (p. 204). Adult learners are often differentiated from their school-aged counterparts by factors of motivation, prior experiences with learning contexts and environments, and situated cognitions. Learning in adulthood begins with how adults view themselves and their education, informed by the transition periods in life in which they exist (Cross, 1981). This aids how educational goals and objectives will be addressed. In addition, adult learning involves change and a convergence of age, exposure to diverse cultures and populations, and acknowledgment and acceptance of gender identity and roles.

Though adults reflect the many cultural, societal, (Boucouvalas & Lawrence, 2010) and socio-economic groups to which they belong, there is no one prototype of an adult learner (Hansman & Mott, 2010) and many factors impact identifying adult learners and the learning activities in which they engage. This includes, but is not limited to physical
abilities, physical limitations, stages of adult development, cognitive styles, social
support systems, communication skills, and level of persistence (Dean, 2002). There are
also various logical and ethical orientations that affect behavior generally, and learning
activity choices specifically (Dean, 2002). Irrespective of individuality or diversity of
background and experience, adults participate in learning activities to become more
productive and equipped for change (Cranton, 1992). This change involves a process of
“exploration, reflection, and application” (Heimlich & Norland, 1994, p. 3) in which
individuals assess who they are and amass this information to put into action. In
addition, change and the need for change signify and embodies the motivation to
participate in various educational opportunities (Birkenholz, 1999). These theories,
constructs, and notions also provide implications for adult education and professional
development program providers. Furthermore, it is necessary to understand how teachers
evolve professionally and the environment in which this occurs (Clark & Hollingsworth,
2002), because the workplace is the setting in which most learning, whether formally or
informally, takes place (Paulson & Boeke, 2006). This also involves capturing the many
meaning-making processes and types of learning as experienced by adult learners that
lead to change and transformation.

*Transformational Learning*

Educators are charged to extend beyond rudimentary methods or static means of
instruction to demonstrate knowledge and affect the greatest impact on students. How an
adult educator learns has a relationship to how they help others learn (Dean, 2002).
Continual teacher change is fundamental to the learning process. Therefore,
transformational learning is at the crux of this discussion because “learning involves a
change of either a meaning scheme or entire meaning process” (Yang, 2004, p. 253).

Mezirow defined transformational learning as

The process of becoming critically aware of how and why our assumptions constrain the way we perceive, understand, and feel about our world; changing these structures of habitual expectation to make possible a more inclusive, discriminating, and integrative perspective; and finally, making choices or otherwise acting upon these new understandings. (p.167)

Transformational learning begins with conversion of or change in thoughts and then, eventually, one’s whole viewpoint. Mezirow asserts that learning uses prior knowledge through a deductive process to aid in constructing modified meaning interpretation (Merriam, Cafarella, & Baumgartner, 2007). This process also acts as a compass to direct future choices and decisions. There are three levels of meaning which include “frames of reference, habits of mind, and points of view” the latter two of which, are aspects of the frames of reference (Merriam, Cafarella, & Baumgartner, 2007, p. 132).

Composed of ten phases, Mezirow’s theory of transformative learning consists of four core areas, which begins with experience, where adult learning is initiated. Experience is the “medium” (Mezirow, 1991, p.5) of transformative learning and is also produced and fostered by what teachers transport to and reflect on in the classroom. Experiences are then interpreted by “meaning schemes” (Mezirow, 1991, p.6) which are composed of information, values, decision, and feelings. In sum, Mezirow’s perspective involves how adults define, analyze, and understand their life experiences and, therefore, evolve and take actions based on these changes.

Fundamental to transformational learning is modifying behavior and patterns of behaviors via changing philosophical perspectives and thus how one thinks and what one believes. According to Chapter 6 on "Transformational Learning" in Learning in
Adulthood, this process involves an alteration of "habit of mind" (Merriam, Cafarella, & Baumgartner, 2007, p. 133). These mental patterns are likened to “second nature” or intuitive reference manual where various resources may be referenced and therefore guide action. The frequency by which these habits influence actions or access mental repertoires varies.

"Transformations in our habits of mind may be sudden and dramatic or they may be slower, incremental changes in our points of view" (Merriam, Cafarella, & Baumgartner, 2007, p. 133). Thus these changes involve one or more processes that are not one dimensional, but fluctuate with the ability to evaluate experiences objectively. In addition, individuals that engage in these experiences are also involved in reflective discourse that promotes empathy and understanding (Merriam, Cafarella, & Baumgartner, 2007). Other areas of transformational and transformative learning examine the "levels of meaning" (Merriam, Cafarella, & Baumgartner, 2007, p. 136). Erikson articulated the belief that "individuals' level of meaning-making may influence how they experience the transformative learning process." This involves a critically reflective practice which is the viaduct by which transformative learning occurs (Cranton, 1994).

Transformational learning also provides a reference point for understanding the development of professionals in professional development and continuing professional education. This transpires as teachers engage in the learning process for themselves, and also as they interact with the learners they teach. Cranton and Wright (2008) found that transformative learning could also be fostered through teacher-student partner
relationships. The researchers asserted that teachers’ view of their professional role was tied to how they helped scaffold the learning transformation process for their students.

Cranton (1994) contends, however, that though many professional learning activities are created to provide novice information that aids in shaping current practice, transformative practice is not guaranteed for adult learners. The researcher also urges that more extensive participation in long-term projects are needed to build instructional expertise.

In their three year study with educators Cranton and Carusetta (2004) sought to identify the meaning of “authenticity” for the educators. The researchers concluded that a transformative process helped establish this authentic identity which also involved critical reflection, which enabled instructors to discuss their sense of self, in addition to their relationship to others. Furthermore, reflection was not solely a conduit for identity to be established, but also a tool used for problem solving.

**Reflective Practice**

As previously described, the reflection process is utilized in understanding and engaging the learning process. It enables the learner to evaluate difficult and multifaceted situations based on previous experiences and knowledge (Merriam, Cafarella, & Baumgartner, 2007, p. 172). There are three levels of reflection that also help to promote transformative learning which also lead to transforming meaning perspectives (Mezirow & Taylor, 2009). This interrelationship involves a metacognitive process that includes thinking about thoughts, feelings, and actions, how the process of perception occurs, and being aware of our perceptive practices. In sum, reflective practice accounts for diverse points of view, being open-minded about various
perspectives, examining and reshaping one's thought processes, and engaging a renewed mindset that results in action in the workplace.

Hatton and Smith (1995) explored the terrain of reflection to define this context within the scope of teacher education. They contend “that reflection is a special form of thought” (p.34) that is not usually associated with the teaching field. However, they argue in defense of the utility of reflection and the importance of it in problem solving which is evidenced by report outcomes characterized by descriptive writing and descriptive reflection writing samples. Thus, reflection may be understood cognitively, and exhibited by physical data.

An extension of reflective practice is critically reflective practice. Critically Reflective Practice (CRP), as summarized by Brookfield in Chapter 3 of the Handbook of Adult and Continuing Education, states that adult educators are not perfect without error, but possess contradictions that continually require awareness and alteration. Though considered a "contested idea that reflects the ideology of the user" (Brookfield, 2000, p. 35), CRP is housed within the concepts of critical theory and modernism, which posits that equity may be pursued and oppression may be combatted through an increase in knowledge and self-awareness, as justice is sorted from injustice.

There are four traditions by which CRP can be examined and utilized. First, from a psychoanalytic and psychotherapeutic point of view, Critically Reflective Practice looks at the influence that negative childhood experiences, such as traumas, have on constraints that prevent adult development in its entirety. Second, the theory unearths the "unjust dominant ideologies" (Brookfield, 2000, p. 37) that are in everyday occurrences. CRP accounts for how critical reflection is involved cognitively and in discourse and the
role of the individual in building, dissecting, and surmising personal experiences and meaning. "Critical reflections on practice focuses, first, on the uncovering of submerged power dynamics" (Brookfield, 2000, p. 39) or unveiling hegemonic practices by also reciprocally critiquing critical reflection which originated from European traditions that originated within white male university-intellectual circles (Brookfield, 2000, p. 43).

Critical reflection does not hinge on or consist of one solitary theory. van Woerkom argues, “no single consistent theory of critical reflection and therefore not much consistency in the definitions of the concept of critical reflection” (van Woerkom, 2010, p. 340) exist. However, there are four intellectual traditions that shape and view critical reflection from a rationalistic perspective (van Woerkom, 2010). They are the Ideology Critique, Psychotherapeutically Inclined Tradition, Analytic Philosophy and Logic, and Pragmatic Constructivism. Given these perspectives, critical reflection may be conceptualized as a cognitive methodology that enables an individual to execute rationality to construct a particular ideal or work toward accomplishing a specific goal. Active in both the subconscious and conscious realms, critical reflection accounts for both implicit and explicit knowledge acquisition. Thus examining the roles of reflection and critical reflection in teachers, specifically as learners, takes precedence. Though more empirical studies concerning this process are needed with teachers, adult basic literacy educators more specifically, significant knowledge can be garnered from observing how the process has impacted teachers and faculty in other disciplines and teaching strata within education.

Maor (2000) discussed the impact of teachers reflecting on their experience in multi-media professional development and how those individuals exploited the
knowledge garnered from those workshops to modify their teaching practices using constructivist lens. Teachers not only wanted more opportunities to engage in inquiry based learning, but also required more time to ask questions, thus, participating both physically and meta-cognitively.

Drago-Severson (2007) examined adult development of teacher community members as fostered by principal leadership. The research delved into the notions of community building via collaborative team sharing and problem solving, developing leadership roles and responsibilities, and reflective practice. Through observations, interviews, and analysis of the principal’s reflection notes, the researcher discovered that reflective practice enabled the leader to institute initiatives that aided the staff in professional improvement and thus school advancement.

An Idaho State University study (Williams, Kagan, & Lightner, 2002) sought to examine the impact of computer assisted instruction on learning style as measured by the Matching Familiar Figures Test (MFFT). The second objective was to determine how instructors defined their learning style, as either impulsive or reflective. The population’s sample consisted of thirty-six pre-service teachers at Idaho State University. The results from the research indicated that those categorized as “reflective” versus impulsive, scored higher on the MFFT, thus highlighting the role of reflection and reflective practice in the educative practice of teachers as adult learners.

Conceptualizing the meaning of teacher reflection and its educational impact may be understood via various mediums. Shoffner (2008) conducted two case studies with eighteen and nine pre-service teachers respectively using electronic reflection as denoted by the notion of the affective domain. More specifically, the studies assessed how
Reflective practice enables pre-service teachers to recognize personal and emotional occurrences encountered in their teaching and learning experiences. Several themes emerged as primary concern for these educators. Among them were “meaningful teaching”, which as an outcome of engaging in reflection, was an expression of the instructors’ quest to create and demonstrate methods that were engaging and “interesting for their current and future students” (Shoffner, 2008, p. 786).

Through these brief empirical examples and the knowledge about the reflection process for educators, important objectives and issues are significant to consider. Reflection is not solely a cognitive process, but enables individuals to develop, evolve, and create, and engage in meaningful experiences. Thus, the teacher as learner is involved in thinking about themselves professionally and personally, further shaping their practice and learning experience.

**Experiential Learning**

Experience is an evocative word that elicits many thoughts and meanings. Once quoted as being "the best teacher" (Taylor, 1617), it is not only a domain in which we frame memories, occurrences, and actions, but also aids in the reformation process, as one engages in novice or familiar experiences, whether considered learning or a non-learning event. Experiential Learning Theory (ELT), developed by David A. Kolb builds on earlier work of theorist such as John Dewey, Kurt Lewin, and Jean Piaget that conceives and promotes greater scope of adult learning that involves and attempts to understand the holistic process of learning. Kolb asserts that ELT may “translate the abstract ideas of academia into concrete practical realities of people’s lives” (p.6). Kolb
further explains that learning is aligned with experience and “the results of that learning can be reliably assessed” (Kolb, 1984, p.3).

Experience may also be regarded as a "resource and stimulus for learning” (Merriam, Cafarella, & Baumgartner, 2007, p. 293). "Since experience can include just about any activity in which human subjects engage" (Miller, 2000, p. 71), restricting the definition to one term, context, or meaning, is a nearly impossible feat. Not only does accrued experience illuminate ideas about adult learning, but the connections learners make between meaning and experience have a significant impact on adult learning (Merriam & Brockett, 2007).

“We learn from experience in a variety of ways” (Merriam, Cafarella, & Baumgartner, 2007, p.159). Fenwick, as cited by Merriam, Cafarella, and Baumgartner, posits that there are five modes of learning through experience, which include reflection, participation in community of practice, making psychological connections, rejecting societal norms and hegemonic practices, and exploring relationships between internal and external environments. These concepts allow for a multi-theoretical perspective, which seeks to improve practice.

Though the frameworks by which one categorizes and understands experience may vary, there are attempts to research and capture the nature of this notion, which juxtaposed with some tenets of andragogy, suggest that adults’ participation in adult education should be “personally involved” (Pascual-Leone & Irwin 1998, p.36) and engaged in tasks and experiences that reflect “real-life”. D’Andrea (1986) described experiential learning as it related to engaging teachers’ reflective process in experiential learning. More specifically, the researcher inquired into the particular cognitive and
emotional development teachers’ engage in as learners and professionals in their learning experience.

In Fenwick's work on *Learning through Experience*, an approach has been presented to understand and theorize the nature of experience. Five theoretical lenses regarding experiential learning have been articulated. They are: constructivist, situative, psychoanalytic, critical-cultural, and complexity theories that examine cognition and the environment.

Within the constructivist perspective, an individual is interpersonally involved and responsible for constructing meaning-making (Fenwick, 2003). Through continual reflection and adaptation, and comprehending the meaning involved in the development of those structures, the individual is engaged in this active process. "The individual constructs new knowledge through experimentation, guided by personal intention, selecting focuses for learning from possibilities presented in the environment, and reflectively analyzing these experiments" (Fenwick, 2003, p. 24). Furthermore, those using this construct engage three aspects of their individuality, body, mind, and emotions. Maor (2000) echoes the benefits of using a constructivist lens which looks at the teacher as a learner who uses teaching and learning environments as a repository to place meaning.

The situative perspective, however, positions the individual within a communal learning environment. "In other words, individuals learn as they participate by interacting with the community" (Fenwick, 2003, p. 25). This theoretical point of view also accounts for some essence of constructivism by acknowledging the contextual influence on an individual's participation by questioning and examining what meaning is
constructed and produced by an individual within that framework. Yet it extends the experience by also looking at the influence of the group on the individual as the community evolves, defines, and redefines its activities.

Psychoanalytic theory, on the other hand, delves into the psyche of the learner to unpack the conflict between the unconscious and conscious mind and the outcomes that ensue as a result. This however, is not a passive automatic activity but requires active engagement, in which one acknowledges the struggles between the two forms of the processes of the mind and therefore, make decisions and choices to either alter thoughts and behaviors, or succumb to pre-existing thoughts and physical conditions. The impact of this theory on experiential learning is the influence on the mental interactions and activities on actual experiences.

Experiential learning has been studied, with respect to how educators use their experience to understand themselves as individuals and professionals and to mediate and improve practice. Though more evidence is needed to provide a prospective from the ABLE field and its respective teachers regarding the impetus for experiential learning’s importance, information from other sects of education may provide examples of practical relevance. Caldwell (1999) executed an investigation using these premises by conducting a qualitative study to comprehend the role experience played in meaning making and identity construction for teaching professionals who participated in an educators’ course. Through qualitative analysis that emerged, teachers expressed that the program elicited positive change meaning development in their professional lives.

The critical cultural theoretical framework examines the role of various ratios of power, societal equity versus inequity, and the consequences that result from the
interrelationship of these factors, impacting experiential learning (Fenwick, 2003). This vast field encompasses and extends to other ideologies and theories such as, feminism, post-colonialism, anti-racism theory, and critical media studies, and a host of others. More specifically, the critical cultural theory unveils power relationships, exclusionary ideologies, discourses, and practices, and promotes acknowledging multiple ways of knowing that are inclusive and emancipatory. Thus, this theoretical lens provides a yardstick by which individuals and groups within society can define and redefine meaning for themselves and others, by accounting for a diverse array of voices and perspectives.

Using a constructivist lens to understand how learning and reflecting is conducted through experience will also help in navigating the process of analyzing teachers’ choices and the resulting impact. The teacher as an adult learner is not solely issued an edict to participate in CPE/PD, but also has the liberty to choose an activity or activities, and chooses according to individual professional necessity, and or personal preference. The adult learner is not solely absorbing information for rote input and output, but also utilizing and continually building upon the information for a specific purpose, thus using a constructivist lens (Fenwick, 2003).

Given the diversity of theory and practice within the realm of experiential learning, the field continues to evolve, and questions and critiques remain. In sum, these perspectives provide a form of reference and platform on which adult learners and educators may reflect and enact by creating a forum for dialogue, participate in opportunities for communal and service learning, mentor, and challenge traditional exclusionary norms and practices. Furthermore, understanding the role of real-life
experience for the adult learner is essential, particularly as it relates to situated cognition and adult learning.

**Situated Learning**

In situated context or situated learning, the learning process and the environment in which it transpires are intimately connected (Merriam, Cafarella, & Baumgartner, 2007). "In situated cognition, one cannot separate the learning process from the situation in which the learning is presented" (Merriam, Cafarella, & Baumgartner, 2007, p.178) because the situation, experience, or context frames or shapes what is remembered in the learning process. Merriam, Cafarella, and Baumgartner also contend that situated learning is also the offspring of culture, which also has social and political implications with regard to knowledge generation and the notion of power and knowledge.

Ramsden (1988) provides an additional perspective, maintaining that a three-tiered structure exists within a situational scope of learning which includes content, transmitting the content, and evaluating the information. The interrelationship of these elements, as learners perceive and experience these factors, aid in shaping the overall process for the learner who continually makes decisions and evaluations. "Learning tasks are always tackled in context" (Ramsden, 1988, p. 161). In addition, circumstances beyond one's control and individuals' levels of motivation and facets of personality also play vital roles in this process.

The situated perspective may also be classified as a "relational" (Marton, 1988, p. 75) view of learning. A relational perspective is an approach of learning in which a particular moment or multiple situations impacts one's learning. Furthermore, in order to change the individual, it is not sufficient to attempt to change who they are, but it is most
beneficial to influence the circumstances in which they coexist. There are two forms of practical application for this theory highlighted by Merriam and Cafarella. They are Cognitive Apprenticeships and Anchored Instruction. As the title of the construct implies, Cognitive Apprenticeships engage learners in a similar manner that a master crafts-person trains a novice. The learner is intimately involved in the learning process that is authentic by ensuring they participate in the activity while also building social relationships. In addition, the learner is also mastering alternate means of thinking and learning. They are also using a constructivist modality of process of building meaning as reflective practitioners.

Anchored Instruction, however, presents a more proactive approach by enabling the learning to use "multiple lenses" (Merriam & Cafarella, 2007, p. 183) to aid in the problem solving process. Learners use "macrocontexts" or "tools of learning" (Merriam & Cafarella, 2007, p.183) to investigate and remediate various issues that require resolve. The objective is to promote expertise through involvement in the problem-solving process.

For ABLE teachers, the work environment provides a unique situated learning environment and vehicle through which teachers serve a unique population of learners and also formally and informally assess their own skills. The workplace has an impact on how job duties are executed (Smith & Hofer, 2003) and is also influenced by federal, state, and local resources (St. Clair & Belzer, 2010), administrative support, and professional development needed to perform efficiently. Therefore, ABLE professionals face additional challenges, but unique opportunities to learn, attributed to the variability in site provisions and funding sources.
Communities of Practice

Providing an environment for learning or a learning community for teachers through professional development endows teachers with opportunities to augment learning and improve instruction (Borko, 2004). Using this approach, teachers work with other colleagues to help inform their practice, augment awareness of other forms of resourceful methods, and get involved in opportunities to become more invested members of their field. Developed by Lave and Wenger, Communities of Practice or CoP’s may be defined as people who assemble to share issues, problems, or information about a topic and by doing augment their knowledge and proficiency by continual communication (Cox, 2005). Though the constituents, format, and participation frequency varies, it is beneficial that groups gather to establish learning. The notion of CoP’s may also be synonymous with and held in the same regard as learning communities where “new ideas are encouraged and nurtured, where teams share vision and collaborate, where mistakes are opportunities for improvement, and where learning is celebrated” (Dilworth, 2010, p.28) both physically, in an in-person traditional setting, and virtually.

Communities of Practice may also be instituted to encourage staff, school, and organizational change. This “conceptual framework” involves a “Systems Thinking” (Senge, 2006, p. 7) that engages thinking about the whole, changing how patterns are perceived and how actions ensue as a result. Likewise, this also harnesses the commitment of constituents to learn at each stage within the organization (Senge, 2006).

Instituting teacher change involves an integration of many system-wide processes and actions that support educators along the path that supports high quality instruction.
The notion of instructional excellence not only benefits the student, but the teacher also, whose knowledge of this information imparted builds and fortifies self-efficacy, methodological confidence, aids the district where the teacher works, who reciprocally, helps instructors. Elmore and Burney (1997) discussed the beneficial impact of CoP’s in their study entitled, “Investing in teacher learning: staff development and instructional improvement”, examining professional development conducted to modify instruction systematically on a district-wide basis. The research found that the school districts that utilized a systematic approach towards change, allowed more broader outreach for both energetic, extroverted teachers and those less assertive about instituting improvement.

Furthermore, this involved a process that developed in stages, enabling teachers to have access to resource materials and examples of best practices, be intimately involved with planning and designing curriculum, implementing the novice approaches, and reflecting on the impact of those actions. However, the journey towards instructional improvement and excellence is not a solo sojourn. “The enemy of instructional improvement is isolation” (Elmore & Burney, 1997, p. 268). Thus, through cooperative learning both individual, group, and district objectives may be achieved. Therefore, engaging in a communal atmosphere promotes further growth, development, establishing communities of practice.

Hara, Shachaf, and Stoeger (2009) researched and analyzed types of online communities of practice from three different groups varying in organizational settings, to define and characterize their CoP typology. These groups included college webmasters, librarians who used digital referencing, and individuals from university and K-12 sectors who shared ideas on using educational technology, denoted as (UW-1).
(DR-1), and (ET-1) respectively. The criteria used to determine if groups constituted online CoP’s included: “members share practice, develop a sense of being a part of a community, undergo meaningful learning through experience, and possess a sense of identity” (Hara, Shachaf, & Stoeger, 2009, p. 743). Online observations, content assessment and evaluation of values stated, and theory alignment with related literature were used to analyze the data to determine if CoP’s exhibited the desired typologies. The researchers found that the CoP’s demonstrated facets of an “open” and “organizational” method of practice that maintained some of the demographical and technological dimensions of the original typologies of the CoP’s, revised some areas, and extended some tenets of the context and membership characteristics. They also found that the CoP’s primary purposes were to share knowledge, characteristic of communities of practice in general.

Yang (2004) also examined technology and CoP’s by studying online professional development workshops as learning communities for teachers. Constructs such as teacher interaction, attitudes regarding participation in the workshop, and how teachers were mentored, were analyzed via message posts and how teachers perceived the quality of their mentoring relationship. The outcome of the case study revealed that participants benefited from the workshop, most specifically for social professional purposes, but not for intellectual functions.

Dilworth (2010) examined professional development as a cauldron in which learning communities existed, were fostered and impacted adult educators in the context of organizational change. The forms of learning communities evident in this study were the following: learning team, inquiry-centered community, community of practice, and
professional learning community. The levels in which the constructs were analyzed were for the organization, the team, the individual, the team within the organization, and the individual within the team.

Maynor (2010) examined CoP’s as Professional Learning Communities, their evolution and development in the school as advanced by principal leadership, and their role in impacting educator instruction. The results of this ethnographic case study exhibited, through principal leadership, a professional development needs assessment was conducted, and time was allotted for PLC participation, which enabled educators to engage in more research-based practices, work more collectively, and implement additional instructional methodologies to their repertoire.

Poell, Yorks, and Marsick (2009) conducted an international cross-cultural case study in the United States and the Netherlands that examined theoretical perspectives used to comprehend project-based learning in work environments. The two frameworks utilized were the “learning network perspective” and “critical pragmatist perspective”, the latter, of which fostered communal learning. The researchers found both disciplines have positive implications for professional development that enable program planners and administrators to create an “organic” environment to be supportive “rather than trying to impose a one-size-fits all set of policies, practices, culture systems, or processes to capitalize on or sustain gains” (Poell, Yorks, & Marsick, 2009, p. 87). Fusing one’s individual’s learning and activities to organizational objectives is one strength of this perspective which aids in the recognizing the role of various forms of Communities of Practice in Continuing Professional Education and Professional Development.
Conceptualizing professional development and continuing education begins with understanding the various aspects of being a teacher, including the myriad of diverse roles performed. “Before we can put forward a plan for training teachers and improving their working conditions we need to know more about teachers” (Smith & Hofer, 2003, p. 12). Moreover, examining the ways in which teachers view themselves as individual learners, their motivation for participation, and the processes that allow their learning to transpire, further aids in honing how PD/CE programs are structured. This is initiated by acknowledging and accounting for how teachers understand themselves as adult learners and incorporating these tenets when developing programs.

**Teachers and Self-Concept**

The educator is an instructional leader and model for adult learning and lifelong learning in the classroom. They present material and model knowledge acquisition in a teacher-centered atmosphere, student-centered environment, or both. There are various other contexts by which teachers may be examined and understood, one of which involves individual self-concept, providing foundation and platform on which perceptions about individuals and their idiosyncrasies can be analyzed, synthesized, and defined. McCarthy and Schmeck conclude, “The self-concept organizes all that we think we are, what we think we can do, and how best we think we can do it” (1988, p.131). Thus, self-concept is atomic, akin to the most basic element that constructs how an individual views themselves. Self-concept also involves varying levels of bias due to the subjective nature of what one believes about themselves as opposed to an outsider’s or another person’s perspective. This is not one unitary notion. The psychological
implications that ensue impact the continual cycle of adult development. In addition, instituting reliability helps to maintain and establish intellectual and empirical integrity.

How and what a teacher learns based on their identity as a person, ultimately impacts their instruction (Andrzejewski, 2008). A dissertation conducted by Andrzejewski examined the connection between teacher identity, knowledge, and practice, unearthing the notion that teacher identity translates into classroom practice aligning teacher knowledge with educators as individuals and professionals. Andrzejewski asserts the need to further investigate and understand the elements of psychology and education embedded within the notion of identity. This is particularly relevant considering the idea that individual characteristics are related to personal and professional transformation.

McCarthy and Schmeck (1988) cite research that observes two opposing views on the relationship between self-concept and learning. They assert that definitions of self-concept range from broad to concise concepts that examine the cognitive schema that remains constant or oscillates according to the time and the frequency by which individuals develop and process their identities. Thus, self-concept involves change with and within an individual as they experience various encounters.

Change is not simplistic or “guaranteed” (Smith & Hofer 2003). However, “to survive in today’s world, adults must be able to change” (Granott, 1998, p.15). Furthermore, though professionals may engage in a rigorous curriculum with a series of programs and offerings, learning and or transformational learning is not necessitated for all adult learners according to goals of their respective program or the tenets presented in
that particular setting (Smith & Hofer 2003). It is the nature of the learner that determines transfer of learning to the participant and how they will use what was learned.

Granott posits that theories that uphold the distinction between learning and development have been overturned by more recent research that acknowledges the interrelationship between the two paradigms that translates into a new concept, “developing learning” (Granott, 1998, p.17). This “concept of developing learning denotes a learning process that shows developmental attributes” (Granott, 1998, p.17). Furthermore, this process allows learners to advance to greater levels of knowledge (growth trajectory), experience knowledge reorganization (fundamental restructuring), and engage in self-support to approach more progressive areas of knowledge (self-scaffolding). This is mediated by the notion of effective teaching. Teaching involves not solely conveying information, but also the way in which that information is presented. The means through which it is disseminated is often denoted by the notion of style.

**Preferred Teaching Styles**

“One means by which teachers convey their attitudes about the teaching-learning transaction is through style” (Conti, 1985, p.220). ”Teachers often egocentrically teach in the way they learn and often believe that the learning style they prefer is the easy or right way to master knowledge.” Ramsden proposes various definitions of effective teaching. One such quote states: "Effective teaching and greater freedom choose context and ways of learning also appear from recent research findings to be important positive influences on the use of deep approaches" (Ramsden, 1988, p. 167).

Norman (2003) facilitated research that examined the teaching philosophies of instructors, teacher-centered versus learner-centered, and the theoretical underpinnings
that informed their preferred teaching style. The subjects of the study were community college educators, two of whom were teachers for speakers of other languages and one additional basic skills instructor. The objective was to inquire if the preferred styles of teacher-centered, learner-centered, or an integration of both methodologies, was reflected in their instruction and influenced an improvement on students’ writing. The qualitative method of analysis revealed that method used was an outcome of teachers’ attitude, yet no one method impacted students’ writing more significantly than another. In addition, teachers had to adapt their teaching to a particular teaching situation and student learning needs.

Another study facilitated with the Missouri Math Academy examined the relationship between the content knowledge, teaching style, and anxiety for math instruction for educators who received professional training through this system. The Missouri Math Academy was established as a standardized professional development educational program that provided teachers with utensils to build communities of practice, math content knowledge, and techniques to create a student-centered environment. The aim of the study was to conduct program evaluation in an effort to correlate the Missouri Math Academy’s middle school math teachers’ “math content knowledge, instructional style, teachers’ perceived level of anxiety with regard to understanding teaching mathematics”. The sample included seventy-two teachers from twenty-eight schools (2002) and eighty-two teachers from forty schools (2003). The resulting statistical significant outcomes were teachers’ increase in math knowledge, an augmented student-centered environment, and awareness of anxiety when teaching math.
Therefore, professional development not only has the capacity to assesses, provide information about, and develop content area knowledge, but also reveals information about various psychological issues teacher endure during the learning process. More empirical studies are needed, however, to greater highlight and understand the teaching and learning styles of adult basic educators. There is evidence of such investigations for teachers within the K-12 sector of education and areas of expertise. Analyzing and learning from such studies may inform the need to pursue such explorations and expansion of best practices and implementation in the area of Adult Basic Literacy Education.

A study conducted by Conti (1985) explored the notion of teaching style with ABE educators, but focused on the outcome for the adult student learners being serviced. The researcher’s goals were to examine the teachers’ teaching style related to assessing student needs and assisting students in their learning process. The sample of teachers consisted of those that instructed learners seeking to improve basic skills, attain a GED credential, or pursue English as a Second Language. The findings of the study exhibited that the educators that demonstrated a teacher-centered approach produced student with the greatest academic gains (Conti, 1985). Thus, one’s “teaching style had a significant impact on student achievement” (Conti, 1985, p.226), particularly with students working to pass the GED test.

Teachers’ instructional styles reflect their conceptual views of teaching and learning, influencing the teaching-learning transaction for the teacher, but also ultimately impacting their students’ learning and development. Wolbrink (1984) analyzed learner preferences of teachers’ instructional methodologies. The sample in this study included
one hundred thirty-three instructors who engaged in staff development workshops. The theoretical foreground for the study was Carl Glickman’s theory that assessed the learners by cognitive/conceptual and commitment levels and then assigned them into defined teaching style within a particular quadrant. The intersection of the resulting data was further extrapolated to determine if the learners preferred a particular teaching style of one of their instructors. Wolbrink concluded that a combination of styles was required of the teachers, and other factors impeded the learners’ objective assessment. These issues included the necessity of establishing and maintaining job security, age, and the meritocratic system established by respective school districts where worked. However, more information is needed to assess the learning needs and categorization of styles for instructors, particularly adult basic literacy education instructors. However, in order for teachers to become effective or improve current methodologies, teachers “have to learn new ways of teaching” (Kwakman, 2003, p.150), build their information base, and navigate their personal learning process.

Preferred Learning Styles

There are various approaches to learning that adults utilize to engage in the process and also analyze and synthesize what information has been provided. “Understanding and utilizing learning styles in teacher education relies heavily on the notion that individuals learn in different ways.” (Honigsfeld & Schiering, 2004, p. 491). Currently, the research examining how teachers learn, reveal that teacher learning is a growth process that involves many aspects, including “continuous development” (Jurasaitė-Harbison & Rex, 2005, p. 427) and reevaluating professional development.
The concept of learning style, or styles, or strategies also has a myriad of definitions that vary according to theoretical context or philosophical perspective. Cranton (1994) asserts that the complexity of the various classifications of adult learning make it cumbersome to encompass in one definition. Therefore, many definitions, concepts, and constructs exist.

Kolb states that learning is the greatest attribute that one can attain and is “reimbued with the textures and feelings of human experiences, shared and interpreted through dialogue and one another” (Kolb, 1984, p.2). Learning styles provide a “typology of knowledge” (p.3) and a means by which an individual learns how to learn. When a learner is at their zenith of learning, they possess the ability to proficiently move from one method of learning to another approach, requiring an awareness of how one operates within this process, or style, so that strengths and weaknesses may be identified to make necessary modifications. He further asserts that learning styles are also shaped by an individual’s interaction with the environment at five levels: “personality, educational specialization, professional career, job role, and adaptive competencies” (Kolb, 2005, p. 6). Boyatzis and Kolb (1985) define learning styles by four constructs that involve experiential learning: concrete experience, reflective observation, abstract conceptualization, and active experimentation that result in four individual styles: diverging, assimilating, converging, converging, and accommodating which hinge on these notions. The learning outcomes that are produced include perceptions, concepts, and behaviors.

Understanding process is fundamental to conceiving learning style. Before the style of learning may be identified and explained, knowing how learning styles work is
primary. Schmeck (1988) further asserts that: "A style is a disposition" (p.85) that assumes the host of the teaching or learning methodology. Physically evident are behaviors that the individual chooses that are offspring of these influences. The objective here is to examine how strategies are defined and examples of empirical research that highlights evidence of these approaches.

Culture is another framework that impacts learning style. Anderson purports that culture as expressed in ethnicity is influential in learning, more specifically how one learns as denoted by style or type. “For teachers, their learning style and cultural background did affect their teaching style” (Anderson, 2007, p.130). Utilizing this theoretical lens also engages teachers who attempt to understand themselves in an effort to comprehend and define their learning mechanisms. In addition, professional development/continuing education/continuing professional education program planners may use this knowledge to better construct programming for educators. Educational philosophies identified by the instructors were in concordance with their respective styles. In addition, teachers’ utilized student needs as a rubric for methodological selection, which was more influential than relying on their particular preference based on their learning style. In sum, learning styles, strategies, or approaches are both a choice of a particular operational mechanism amalgamated with the thinking process.

The charge to understand the learning and future teaching preferences of pre-service teachers has also been advocated. The relevance is two-fold. Teacher education and professional development programs may be informed and reevaluated by what is garnered by continual research in teacher training and preparation. “Teacher educators, then, must engage pre-service teachers’ personally meaningful experience and emotions-
past present- in order to challenge their beliefs on and create new understandings of teaching and learning” (Shoffner, 2008, p.783). In addition, developing curriculum to properly prepare future educators may also be instituted.

Anderson (2007) conducted research with pre-service teachers at Spalding University to assess if preferred learning styles could inform course development. The instruments used were Kolb’s Learning Style Inventory, demographic survey, and teacher interviews. The researcher discussed the importance of using empirical outcomes to help improve respective teacher preparation and educational programs that will then, reciprocally, encourage students to become lifelong learners.

A study executed at Northeastern State University in Oklahoma with K-12 Special Education pre-service teachers (Foster, 2006) was facilitated to reveal the components of these educators as teachers and learners according to educational philosophy, teaching style, and learning strategy preference. These adult learners asserted an “Engager” learning style, preferring to be intimately connected to relationships in the learning environment. The most significant connection between the educators’ philosophy and teaching style was the instructors’ perceptions about their roles as teaching and learning transpires (Foster, 2006).

Analyzing teacher learning styles is also important when understanding the context of teacher change. Rosenfeld and Rosenfeld’s (2008) case study of teacher learning preferences examined teacher change after professional development participation. The researchers’ objectives were to analyze how the elementary and middle school teachers changed in language, beliefs, and practices with regard to their individual learning differences. Prior to the professional development participation,
researchers found that the teachers held more rigid ideas about how they learned and taught in the manner in which they preferred to learn. Teachers also demonstrated change during their participation; and after participation concluded, they demonstrated increased awareness of their learning diversity, and “became more effective teachers” (p.34).

International studies may also inform the understanding of how future teachers learn. A research investigation at Achva Regional College in Israel (Gilead, 1994) explored the teachers’ preferred learning styles, as informed by teaching experience, grade level for instruction, type of school where employed, and location of in-service. Three hundred twenty-one teachers were assessed by the Kolb Learning Style Inventory (LSI) and completed a demographic survey. Results from the quantitative data indicated that fifty-two percent of the teachers exhibited an Abstract orientation to learning, and forty-eight percent demonstrated a Concrete orientation to learning (Gilead, 1994). In sum, most of the instructors preferred teaching with a lecture format, and the core external component that most influenced learning style statistically was grade level being taught, demonstrating the intersection between teaching styles and learning style.

**Interrelationship between Learning Style and Teaching Style**

Teaching style as a reflection of and in relationship to learning style has been expressed in empirical investigations stated in literature from various areas in educational research literature. Dean (2002) asserts that the means by which adult educators teach is linked to how they learn. Though “the idea that one’s preferred teaching style is reflective of one’s preferred learning style has been expressed by many educators” as Huelsman (1983) suggests, the specific theory or theories that establish the direct
connection between the two entities has yet to be defined. How these constructs are measured and the instruments that gather and interpret the data are another concern. Though the studies that examine this relationship for ABLE educators is deficient compared to their K-12 counterparts, using the research from the K-12 sector can be used as a springboard to help understand the scope of the teaching learning interrelationship for ABLE educators.

Wennes (1998) attempted to explore this issue by studying the probable relationship that preferred teacher learning had to teaching styles. Five teacher participants from a middle school in northern Ohio were the subjects, who were interviewed and observed. The instructors were queried regarding their knowledge of learning styles and completed a learning style assessment survey. Observations were also conducted to align stated learning styles with teaching style outcomes. The researcher found that these teachers taught in the manner in which they learned.

Other researchers have examined teaching style of educators across subject-specific disciplines and professions. One particular example facilitated research in the field of nursing education. Pollick's investigation of nursing educators sought to examine if their teaching style matched their learning style and thus if the teaching style was preferred by their nursing students. In addition, Pollick also inquired if the teaching style and learning style impacted the grade in the course. The researcher concluded that eleven of the nineteen teachers preferred the teaching style likened to their learning style and the style preferred by their students.

There are additional studies that have exhibited the relationship between teaching and learning for secondary school educators. *The learning and teaching styles of*
Tennessee secondary business education teachers (Ladd, 1995) using the Canfield Learning Styles and Instructional Styles Inventory was researched to identify the two distinctive styles among these educative frameworks. Several findings resulted from this study. The following outcomes resulted among these teachers as learners and their preferences: they possessed more than twenty years of teaching experience, opted for organized classrooms, specificity of detail, working in groups, an auditory learning style, and a Social/Conceptual teaching and learning style.

Allen (1988) also engaged in research to discover the relationship between learning and teaching style in theory and in practice, as these constructs are influenced by years of experience, educational background, and curriculum area taught by instructors. The subjects for the study were high school teachers from rural South Central Kansas. The outcome that resulted indicated instructors that chose to learn utilizing the following subscales also preferred to teach likened to the same constructs: auditory-kinesthetic, written-expression, and independent learning. However, the analysis also indicated that instructors preferred learning more than instructing in the corresponding areas: visual language, auditory numbers, and auditory-visual-kinesthetic. In addition, teachers preferred teaching compared to learning in the areas of auditory language and group learning.

Davis (2010) also argues that personality and personal preferences are at the core of educators’ teaching style and learning style. Davis further contends that “most educators teach in the way they learn” (Davis, 2010, p. 5), and that the subconscious impacts both personal and professional choices, as well as the environment where teaching and learning transpires.
James and McCormick (2009) posit that students' learning and learning how to learn independently hinges on teachers' use of inspiring and innovative practices, and is also the foundation of teachers' learning how to learn, particularly when servicing students in an urban context (Daley, Fisher, & Martin, 2000). In a mixed methodological research study in England, James and McCormick (2009) sought to explore this concept via a Learning How To Learn (LHTL) project for both students and instructors, but focused more on the outcome for the latter. The researchers state three core areas that undergird this notion, which include, "assessment for learning", "learning how to learn", and "learning autonomy" (p.975). James and McCormick unearthed teachers’ beliefs about learning which had an impact on what was implemented in their classrooms.

They also found "dimensions of teacher learning" (James & McCormick, 2009, p. 977) to include: action research and executing joint research with colleagues (inquiry); staff cooperative discourse and learning (building social capital); engaging in "critical and responsive learning", and valuing reciprocal learning for themselves and their students. In sum, they found that learning autonomy should be the end goal. They also found that teachers possessed positive beliefs and values about education, which were not equal across all groups of teachers; however, instructors also struggled to bridge their theoretical values with classroom practice, and school leadership was critical in providing opportunities and learning landscapes for the exchange of best practices. These outcomes emerged through participating in professional development.

**Continuing Professional Education and Professional Development In Education**

Continuing education and professional development are components to formal education (Merriam & Brockett, 2007) that enable adult learners to engage in the process
of lifelong learning. Lifvendahl (1998) purports that “numerous definitions of the field have emerged” (p.4), and outlines several theorists’ conceptualizations of adult continuing education, which has been described as a “process” and a set of “activities” (p.5). Continuing professional education also involves curriculum that prepares professionals to augment their knowledge by staying informed with the most current information and changes in the field, enabling program participants to advance into “mature practitioners” and potentially garner occupational promotions (Queeney, 2000, p. 375). Thus, the essence of continuing education “is to improve the practice” (Cervero, 2000, p.3) of professionals.

According to King (2002) “Viewing professional development as adult education assists in not only focusing on the educator as learner, but also enabling us to consciously appropriate relevant theory, research, and practice from the adult education field” (p. 2). There are various sub categories by which the former are identified and described that range from “staff development” to “in-service” (Randi & Zeichner, 2004. p. 184), as well as professional learning activities. This allows adult learners to enhance skills and knowledge about their profession in addition to informing the proper execution through practice. Understanding and applying the tenets, issues, and changes that inform occupational practice are some of the most influential means to augment skills and make progress (Cevero, 1988) for individuals defined as professionals.

Continuing Professional Education engages professionals in a course of study or series of studies throughout the tenure of their careers (Queeney, 2000). This enables individuals to stay current with related theoretical and occupational changes, transition from novice to expert practitioners, and to transition into other fields (Queeney, 2000).
Cevero states (1988), “In order to talk intelligently about continuing education for the professions as a field of practice, the differences between professions and other occupations must be examined” (p.5) and defined however vast. Although professions are essential and significant to their associated societies because they are culturally perceived to aid in progress and advancement (Cevero, 1988), how various individuals evaluate professions varies, whether favorably or unfavorably, with respect to changes that they believe should be made. Continual learning then becomes one of the outcomes of the allegiance to change in relationship with the dynamics of the workplace and the professional field (Flagello, 1998). For adults either independently seeking or being prompted to participate in continuing professional educational opportunities, “Learning becomes the catalyst to growing these abilities and capacities to perform” (Flagello, 1998, p.49).

This process of and engagement in change that professionals experience in their respective fields is often substantiated and reconciled via Continuing Professional Education (CPE). Houle (1980) states:

No single course of action can resolve the difficulties encountered in all these arenas of debate and conflict, but a pivotal need is for every professional to be able to carry out his or her duties according to the highest possible standards of character and competence. (p. 7)

Houle (1980) further asserts the importance of the field of CPE, and how it burgeoned and evolved to aid in accommodating and executing these “duties.” Historically, Cevero states the 1960’s was the era where continuing education systems began to take root and continued to grow until the 1990’s, when four movements started to emerge and shape CPE. The respective four trends include: the workplace as the
predominant CPE provider, universities and professional associations as providers, collaborations among groups, and continuing education as a regulatory mechanisms. Given these movements, significant issues and questions have also arisen, challenging the evolution of the field. Why is CPE necessary? Who profits from the advantages of CPE participation? How can CPE’s potential be maximized (Queeney, 2000)? Who will decide which CPE opportunities will be provided.

Knox (2000) rearticulates Houle (1980) substantiating the “rationale for fourteen goals for lifelong professional education on which continuing education programs can focus.” These include maintaining ethics, “credentialing” (p.15), individual being afforded opportunities to problem-solve, enabling access to formal education, and understanding and applying knowledge (Knox, 2000). The field of CPE has a broad opportunity to provide opportunities for building professional competence, augmenting accountability, and providing a contextual foundation for one’s practice (Queeney, 2000).

In sum, Queeney suggests the following “strategies” (p.379) for “performance consultants to professionals they serve” (p. 380) for strengthening the field:

Thus continuing professional educators will have to redefine the way they do business in order to produce CPE that meets the challenges described earlier. They will need new capabilities, including those related to collaboration, needs assessment, practice-oriented instructional design and delivery, performance-based evaluation, inter-professional education, and distance education. (p.379, 380)

Therefore, educators are both strengthening their skills and being held accountable for their practice through engaging in such systems. A qualitative case study conducted at Kent State University concluded that when educators engage in staff development, they
made connections in their classroom that positively impacted student learning (Campbell, 2008).

**Continuing Professional Education and Professional Development for ABLE Educators**

The professional development systems for ABLE instructors are administered by private entities that are governed by their respective states (Smith, 2009). "The history of professional development in ABE is tied strongly to the history of federal funding of ABE, which can be traced to the passage of the Adult Education Act of 1965 and its transfer to the U.S. Office of Education (USOE) (now the U.S. Department of Education) in 1966." (Belzer, Drennon, & Smith, 2001, p.152). In the state of Ohio, for example, grant funding is provided via an Adult Basic Literacy Education grant, which affords financial resources to Resource Center Networks to facilitate professional development. Accountability is stringent for many ABLE programs with regard to mandating instructor PD/CE participation. However, the particular choices offered to instructors span a wide range that include conferences, workshops, online courses, and Alternative Delivery options that allow teachers to engage in an array of non-formal options.

Smith and Gillespie (2007) summarize research regarding ABE teachers’ working conditions, educational preparation, and professional development models within the scope of teacher change. There are many factors which have an effect on the ABE/ABEL teachers and their relationship with professional development engagement. They are:

1. The part-time status of their work schedule
2. The high turn-over rate of those that leave the ABE/ABEL field
3. The demand and necessity to teach many subjects and many educational functioning levels
4. The lack of formal training involving teaching adults/adult education
5. Professional development is primarily in the format of an in-service
6. Variability in funding for professional development participation
7. Variability in professional development program structure and activity type

However, the extent of impact on the instructor has yet to be statistically monitored, studied and empirically publicized. Smith and Gillespie also state that “there is so little research on the effectiveness of ABE professional development” (2007, p.213) that research from K-12 is used to various professional development models, their respective objectives, and the “content” or curriculum. Therefore, more empirical evidence is needed to assess program efficacy and motivating factors for participation to analyze and better understand how to improve the learning environment and experience for ABEL educators, the degree of teacher change, and constructing a more insightful, valuable professional development system.

**Motivation to Participate in Professional Development and Continuing Professional Education**

There are several factors that influence or motivate teachers, particularly participation in professional development and continual professional education. Factors that impact participation in professional development or continuing professional education include, but are not limited to: educational level (Birkenholz, 1999), gender, occupation type, wanted to increase salary, and the evolution of the workforce. Ginsberg and Wlodkowski (2010) cited research that suggests many adults participate for occupational or work-related reasons. Valentine (1997) also asserts that adult education activities take place in the workplace more than in post-secondary institutions. Work
contexts and the essence of the adult literacy field affect teachers’ professional
development, professional learning choices, and teacher as learner (Smith & Hofer,
2003). Scribner, however, (1999) notes teacher learning in general should be explored
further, by examining both extrinsic and intrinsic factors that motivate teachers to learn:
financial compensation and licensure mandates (extrinsic), addressing student knowledge
gaps, fulfilling context knowledge needs, and managing classrooms (intrinsic). However,
more extensive research is required to delve into the specific external and internal factors
that motivate ABEL/ABLE teachers to participate in professional development,
continuing education, and professional learning communities. In addition, providing
activities that will attract teachers as learners and be conducive to their learning is
essential. Torff and Sessions (2008) found teachers who had ten or less years teaching
experience, had a more positive view of professional development. In a 2009 study they
also found support for professional development was greater by teachers who instructed
in communities with a higher socio-economic status (Torff & Sessions 2009). Baldwin,
Magjuka, and Loher (1991) found that when trainees were given opportunities of interest
for engagement and the training module of their choosing, participant motivation
increased.

Fortunately, the ABLE PD system in Ohio provides instructors with a wide array
of Alternative Delivery Options that range from workshop participation to reporting
about the impact of read literature. This allows instructors access to a myriad of choices
that address many areas and levels of interest. However, understanding the motivation to
select these activities and their impact requires further investigation as the system and its
respective teachers evolve and advance.
A 2005 study by Lohman with high school teachers and Human Resource Development professionals concluded that internal factors such as personal enterprise, an affinity for learning, desire to learn more about their respective professions, professional development dedication, and their personality impacted their motivation to participate in professional development activities. However, Renninger (2011), found that the structure and content of the workshop motivated the participant to continue participation in addition to motivational profiles of interest and self-efficacy. Kwakman (2003) also examined teacher participation in professional learning activities and discovered three types of factors that motivated participation: work environment, task, and personal characteristics.

A study conducted Desimone, Smith, and Ueno examined the purpose of content-focused professional development for high school math teachers. They discovered that professional development was most beneficial for educators with a formidable pre-existing math content knowledge. It has been suggested that “Teachers could be motivated to take more challenging professional development if it was clear how the activities contributed to their school vision for teaching and learning” (Desimone, Smith, & Ueno, 2006, p. 28). Thus, having knowledge of the impact was deemed necessary.

**The Impact of Professional Development and Continuing Education on Teachers**

The extent to which professional development provides practical influence for instructors has been and may be argued. However, improving the empirical methods that measure and demonstrate its effectiveness with teachers is needed (Desimone, 2009). This is needed to better understand teaching, learning, and education reform. “Research on effective teaching over the past two decades shows that effective practice is linked to
inquiry, reflection, and continuous professional growth” (Harris, 1998, cited by Chiang, 2008, p. 1272) and learning which is aligned with change is provided through the environment of PD/CE (Clark & Hollingsworth, 2002). Jurasaitė-Harbison and Rex found in their 2005 study that when instructors participated in research as professional development, teacher identity and practice is remodeled, and becomes a simulated laboratory in which to grow and reflect.

However, when attempting to measure impact and effectiveness of PD/CE for ABE teachers, the often part-time work status and lack of access to learning opportunities (St. Clair & Belzer, 2010) provides an area of contention. In addition, other issues to consider are: where ABE is positioned in their respective states' bureaucracies, the varying structure of PD and CE across various states, addressing the needs of participants as well as program constituents, and the interrelationship of these factors (Belzer, Drennon, & Smith, 2001). Smith (2009) found that the institution of the National Reporting System also had a great impact on the professional development system and increased the participation of instructors in professional development. This is pertinent when considering the legislative and fiscal implications that have shaped the nature and structure of professional development and continuing education for adult basic literacy educators.

Despite the various debates, the framework for delivery, and the issues questioning the extent of influence, professional development and continuing education exists as a system to aid educators along the continuum of education and lifelong learning. Furthermore, the institution of continuing education for professional development is beneficial not solely for the literacy instructor but also their students.
Ferguson and Womack (1993) assert that “…a positive relationship has been found between the amount of education coursework taken by teachers and their students’ achievement” (Ferguson, Womack, 1993, p.56). Johnson (2009) also states that mandating 125 hours of Continuing Education Units beyond initial teaching licensure aids in connecting information learned in workshops to teachers’ respective classrooms and helps programs monitor the effectiveness of course offerings.

Adult basic educators are a vital component in aiding their adult students with transitioning across barriers to increase participation. Johnson and Stevens highlight that “social aspects of instruction (i.e. development of a community of learners within classes and having respectful caring instructor) are critical factors for adult students” (Johnson & Stevens, 2008, p. 26). This viewpoint also applies to adult learners participating in continuing education and professional development programs. Though the classroom is the center stage for their learning (Johnson & Stevens, 2008, p. 26), other opportunities for professional growth, such as the Face-to-Face faculty development program, need to extend “beyond a one-day event” (Johnson & Stevens, 2008, p. 28). As educators engage in these learning opportunities and communities, not only are these reaping the benefits of personal and professional growth, but they likewise become examples of lifelong learning for their students. Smith and Hofer (2003) articulated on the behalf of teachers, the need for PD that would be readily available for immediate use in the classroom.

Though professional development does not necessitate the sustainability of change within an individual in general and teachers specifically, participants in professional development, continuing professional education, and other learning activities do not leave the learning experience or environment unaffected. A study (Smith &
Hofer, 2003) sponsored by the National Center for the Study of Adult Learning and Literacy (NCSALL) researched how adult educators changed in thinking and action as a result of the type of professional development participation. The types of PD included workshops, mentor teacher groups, and research groups. They discovered that teachers experienced change, changed the most as a result of participating in research, and changed equated with how they rated their professional development.

Smith and Hofer (2003) also contend that in addition to professional development, ABE teachers need collegiality to help support their learning and participation in learning activities. They cite Tibbetts et.al (1991) who state that the lack of “contact with other practitioners”, coupled with the part-time nature of employment, reinforce the barriers to professional development participation. “People’s ways of learning represent relations between them and certain aspects of the world around them…any attempt to improve learning has to focus on relationships as a whole” (Marton, 1988, p.53).

Davis (2003) investigates the role of study groups in professional development to examine adult learning styles in an atmosphere of communal learning. Using fifty-seven subjects, divided into fourteen study groups, the preferred learning styles that fostered skill transfer were also analyzed at the individual level. Kolb’s Learning Styles’ Inventory and a Study Group Participant Questionnaire were units of analysis. Four categorical outcomes were defined for the groups: how they were constructed and managed, their resources and technical support, dynamics and relationships, and the operational functions that addressed issues and objectives. Though no statistical significance indicated transfer of skills according to the group membership, divergent learners exhibited the greatest mean for skills transfer. This study is relevant in
examining both the impact of professional development and tenets within, such as individual knowledge acquisition strategies juxtaposed with the impact group dynamics on individual and communal learning.

A case study conducted with ABLE/GED and ESOL instructors in Texas examined how teachers felt they benefited from a specific professional development program entitled Project IDEA. The researcher concluded that not only did teachers feel satisfied with their participation in the program, but they felt they grew professionally as a result. Teachers may impact their students by modeling learning, ensuring that their educational “outcomes are applicable, practical and make a difference” (Cafarella, 2006, p. 209) in students’ lives. Queeney further states that “to establish a relationship between CPE participation and improved practice, educators must conduct a sound outcomes evaluation to determine what if any impact the CPE has had on the enhancement and improvement of professional practice” (Queeney, 2000, p.384).

Participation in learning activities is not the sole path to progress. Embedded within this process is not solely being present but also actively engaged in the knowledge capture and information processing via reflection. Runhaar, Sanders, and Yang articulate the interrelationship between teachers’ reflection and feedback inquiry, “two crucial components of professional development” and how they have been impacted by job self-efficacy, as denoted by “ability”, learner goal orientation, and transformational leadership.

The researchers proposed three hypotheses:

1) the greater the learning goal orientation of the teacher, the greater they will reflect and ask for feedback
2) learning goal orientation mediates the relationship between occupational self-efficacy, reflection and feedback

3) the greater the teachers’ perspective of their leader as transformational, reflection and feedback inquiry will increase.

The authors build their theoretical foundation on the premises of previous studies that indicate that increased teacher self-efficacy may lead to greater participation in professional learning activities (Runhaar, Sanders, & Yang, 2010). Thus constructing continuing education and professional development programs to improve literacy instruction for adult basic literacy educators is necessary because “adult literacy students’…come to ABE programs with large gaps in their mastery of skills” (Askov, Van Horn, & Carman, 1997).

It is imperative that educators open themselves to learning new methodologies and approaches to instruction. This process involves adopting attitudes that enable them to engage in learning and building knowledge by participating in educational programs that aid shaping them as professionals and individuals. The cycle of pedagogy and andragogy are on the continuum of teacher education.

J.L. Kincheloe in Teaching Teachers: Building a Quality School of Urban Education provides these recommendations with regard to the role of continuing education, “help teachers learn how to transform the knowledge of disciplines into curriculum material for students while appreciating counter disciplinary knowledge and their curricular role”, “engage teachers in the study of student development, not merely in a white, male, upper-middle class context but in a variety of cultural, gender, and class domains”, “facilitate teacher’s study of their own practice in relation to race, class, or
gender oppression, making use of new ways to do this that have been developed over the last few decades”, “employ research on teaching to help teachers operate, but use research produces within diverse paradigms of knowledge production and often generated by teachers themselves” (Kincheloe, Burstyn, & Steinberg, 2004, p.4).

This is essential as teacher education departments’ and other adult education training programs strengthen their curriculum and instruction policies and practices, learning transfer and information implementation will improve, further developing teacher-student relationships and the reciprocal learning process. This heightened awareness, experience enhancement, and skill deployment will not only increase diversity, sensitivity, understanding, and enhanced work ethic, but also overall learning for the teacher and the student.
Summary of Literature

There are studies that suggest that instructors teach as a reflection of their learning, as an expression of their personality, and other personal and psychological factors. There is also literature that asserts the importance of examining teacher identity and the roles of experience, continuing education, and transformation as factors influence teachers as individuals and professionals. Research has also demonstrated the role of PD and CE in impacting and transforming teachers as instructors and as learners. Though research within the realm of K-12 education is predominate, using these studies provides a three-fold benefit: a critical foundation to aid in educational theory development, a rubric to juxtapose the basis for this study, and an analysis of the theory-practice connection when examining teachers as learners. In addition, this study attempted to build upon and extend prior research and make connections to occurrences within the field of Adult Basic Literacy Education and its respective educators within the context of professional development. The purpose was to provide a framework by which to understand how ABLE instructors learn and the connections they make between the learning styles and educational activity choices, if any. This was also relevant as professional development and continuing professional education programs are constructed and produced and continually evolving. Due to the lack of studies within the field of Adult Basic Literacy Education with regard to teachers’ perceptions of their learning styles and motivation to participate in professional development and continuing professional education, this study attempted to examine and address these constructs.
Chapter III

METHODOLOGY

This chapter addresses the methodological framework used for the study. The purpose of this study was to examine the role of the ABLE educators’ learning styles as participants in professional development and continuing professional education and their motivation for selecting specific types of educational activities. This investigation was governed and guided by the following research questions:

1. What are the preferred learning styles of ABLE teachers?
2. Is there a relationship between ABLE teachers’ preferred learning styles and the types of continuing professional education learning activities in which they participate?
3. What are the motivating factors that drive ABLE teachers to participate in continuing professional education?
4. Is there a relationship between ABLE teachers’ characteristics and their participation in continuing professional education?
There is a gap in the research for Adult Basic Education and Literacy educators with respect to investigating their preferred learning styles, the role of reflection in the process, motivation to participate in Professional Development/Continuing Professional Education, and the relationship between these factors, if any. Likewise, few studies illuminate ABLE/ABEL instructors’ input regarding these notions, particularly within the field of teaching, learning, continuing professional education, professional development, and continuing education.

**Theoretical Framework**

The rationale for this study was to examine and better understand the role of and motivation for the ABLE/ABEL educator as a learner when participating in learning activities for professional growth and development. To properly guide the scope of this study, a theoretical framework was necessary in order to define the constructs being researched, so that each concept could be organized and described conceptually (Knowles, Holton, & Swanson, 2005). In addition, the theoretical framework provided the lens necessary through which quantitative and qualitative outcomes could be understood.

A constructivist paradigm was important to shape this study to better understand how teachers learned. A constructivist perspective theorizes that students bring their interests, beliefs, and knowledge to their learning environment (Howe & Berv, 2000). Individuals develop their own understanding and knowledge of the world by involving themselves in experiences where they may reflect on those events and bridge new with former knowledge and experiences. Thus, individuals become active engineers for their
learning. Reflection is also used to solve problems as one adapts to his/her purpose (von Glaserfeld, 1995).

Learning also involves two dimensions, informational and transformational (Drago-Severson, 2004), that respectively involve enhancing one’s expertise or adding new knowledge and “changing how a person knows” (Drago-Severson, 2004, p. 19) or acquires information. In addition, learning style assessments, more specifically, can provide mechanisms by which an individual’s approach to a learning situation can be further understood as one enters a process of self-discovery and as information is absorbed, processed and utilized (Carter, Bishop, Kravits, & D’Agostino, 2002).

**Conceptual Framework**

Identifying teachers, teachers’ learning styles, professional development activity preferences and motivation for participation were objectives of this study. These objectives involved metacognitive processes, conceptualizing what instructors know and how certain learning modalities are viewed. Instructors were also asked to identify what learning activities they prefer and the frequency of professional development participation. ABLE educators function in various roles including teacher, tutor, “program members, members of the field, and learners who are learning how to teach” (Smith & Hofer, 2003, p.1). These instructors, in addition, are encouraged to attend educational development for professional fulfillment and enhancement according to mandates issued by state governance and the program where they are employed.

Regarding continuing education for adults, Knowles (1980) explains that there is a mode by which adults learn, choices adults make to engage learning, and the social setting that unites participating learners (Lifvendahl, 1998). Furthermore, continuing
education and professional development is pertinent to staff development which is a channel for “personal and professional growth, the improvement of instructional practice, and therefore, of educational service to students” (Cavallini, 1998, p. 243). This notion is also fundamental to this study. Thus, the objectives of this study were to categorize the characteristics of the learners according to learning styles, identify the Continuing Professional Education/Professional Development activities that were preferred by the learners as informed by learning style, examine motivational factors that helped to negotiate and inform choices made by the instructors as learners, and examine participation as informed by teachers’ characteristics. With these premises in mind, a constructivist framework and theories associated with adult learning, such as Andragogy, Transformative Learning, Experiential Learning Theory (Kolb), and adult learning styles, were essential to frame, guide, and understand empirical outcomes and to design the instruments that were used to collect data.

**Survey Design**

This research study included a mixed-method of quantitative and qualitative design. The survey design for this study included two questionnaires using the survey research method. The survey research method was used to provide a statistical approximation of the “target population” (Fowler, 2009, p.11) who are Adult Basic Literacy Education instructors. The two surveys or questionnaires were *The Learning Styles Inventory 3.1* developed by David Kolb and *ABLE Instructors as Adult Learners within Professional Development-Survey*, developed by the researcher. Using a questionnaire enabled and allowed the researcher to collect data in a swift and efficient manner and also provides a format by which responses may be analyzed easier (Gillham,
The quantitative technique also provided an opportunity where a “mass of data can be described and summarized” (Hinton, 2004, p.2). A quantitative approach was utilized in this study to analyze outcomes from the ABLE Instructors as Adult Learners within Professional Development-Survey and the Learning Styles’ Inventory.

There are four learning modalities that combine to create four learning styles, based on how questions were answered on the Learning Styles’ Inventory survey. After participants took the Inventory, then the results were indicated on a feedback graph which showed the learning style in one of four quadrants that demonstrate learning style outcomes. The learning styles include Converger, Diverger, Assimilator, and Accommodator. The four learning mode outcomes defined by the Learning Styles Inventory are composed of four approaches to experiences that helps one react to what situations require: Concrete Experience, Reflective Observation, Abstract Conceptualize, and Active Experimentation.

Concrete Experience is noted as “learning through feeling” using “direct experience” to acquire knowledge through intrapersonal relationships, empathy, and flexibility. Reflective Observation involves “learning by watching and listening,” taking importance over executing actions. The reflective observer is cautious about making decisions, but also is open-minded about examining multiple perspectives and searching for meaning. One who utilizes the Abstract Conceptualization mode relies on logic and is characterized by “learning by thinking.” Abstract Conceptualization involves organization, using logic for the inquiry and dissection of ideas, and using intellect to comprehend and negotiate encounters and circumstances. Active Experimentation is the practical dimension which is described as “learning by doing.” This learning mode
involves taking action, completing tasks, and experiencing the results of one’s accomplishments.

The Converger modality combines Abstract Conceptualize and Active Experimentation, in which learners apply ideas and theories into practical situations. Learners who are Convergers are problem solvers. Convergers are also practical. In a learning environment or training event, Convergers want to find the usefulness of what is learned and how to best apply it.

Divergers’ styles include Concrete Experience and Reflective Observation, in which concrete situations are viewed from different perspectives and observations are preferred over action. Learners who are Divergers may be understood as those who may enjoy brainstorming or working in groups, to gathering and assessing information from other members with varying ideas. Divergers may not be the most actively verbal group participants, but may yet benefit the group by understanding all perspectives in a balanced way. Divergers also are learners who would examine or notate multiple benefits of a learning event or activity.

Assimilators employing a combination of Abstract Conceptualization and Reflective Observation, where a great depth and breadth of knowledge can be fashioned into a concise and logical format. Assimilators are analytical. These learners want to think through a process and would find a lecture-style learning environment beneficial.

Accommodators, a merger of Concrete Experience and Active Experimentation, use hands-on experience to learn. Accommodators are learners who execute a plan with action, based on what they feel. Accommodators engage in learning activities where they are also able to experiment with what is learned.
The research design also included qualitative semi-structured interviews. This qualitative data collection method enabled the researcher to provide the “emic insider’s perspective, empathizing with the subjects of research” (Bray, Adamson, & Mason, 2007, p.43). Semi-structured interviews gave the interviewees the opportunity to share what the research meant to them (Galletta, 2013). In the interviews, the “subjects are given more latitude to share their own views” (Bray, Adamson, & Mason, 2007, p.43). An e-mail was sent out to all participants who completed both quantitative questionnaires. The first ten instructors that responded positively to the inquiry were selected to participate in the qualitative interviews. Ten instructors were individually interviewed with semi-structured interviews to further explore their beliefs about their concept of learning styles, relationship of learning styles to professional development choices if any, motivation to participate in professional development, and other factors. These factors included concepts such as, teaching experience, level of education, and classroom setting. Instructors were also asked to provide their insight regarding professional development system improvement and how the changes would impact their experience and participation in professional development. They were interviewed either in-person, via telephone, and web-based media.

Participants

Sample

A non-random sample of data was collected from practitioners from Adult Basic Literacy Education programs within the state of Ohio. There were 977 total instructors in the state according to the 2011-2012 state A.B.L.E. Directory for educators who work within programs that receive the Adult Basic Literacy Education Instructional Grant.
This was composed of 857 teachers categorized as part time, 120 categorized as full time, and six volunteers. Table 1 refers to the group of 80 ABLE teachers that participated in this research study. The number of participants’ responses varied according the questions answered on the *ABLE Instructors as Adult Learners within Professional Development Survey* which is apparent in Table 1. Some participants, however, skipped certain questions about demographics, but no patterns of non-response were evident. Table 1 indicates participant demographic data including gender, level of education, the numbers of years in the teacher’s professional experience, and the classroom setting in which instruction is facilitated. See Table 1.

**Table 1**

*Participant Demographic Data (n=80)*

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
<th>Number</th>
<th>Percent*</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Gender</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>1.82</td>
<td>65</td>
<td>83.3%</td>
</tr>
<tr>
<td>Male</td>
<td></td>
<td>12</td>
<td>15.4%</td>
</tr>
<tr>
<td>Other</td>
<td></td>
<td>1</td>
<td>1.3%</td>
</tr>
</tbody>
</table>

**Level of Education**

<table>
<thead>
<tr>
<th>Educational Level</th>
<th>Number</th>
<th>Percent*</th>
</tr>
</thead>
<tbody>
<tr>
<td>High School Diploma or equivalent</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>Attended College- No Degree</td>
<td>2</td>
<td>2.5%</td>
</tr>
<tr>
<td>Associate’s Degree</td>
<td>1</td>
<td>1.3%</td>
</tr>
<tr>
<td>Bachelor’s Degree</td>
<td>14</td>
<td>17.7%</td>
</tr>
<tr>
<td>Bachelor’s Degree+ Education Certificate/Licensure</td>
<td>22</td>
<td>27.8%</td>
</tr>
<tr>
<td>Graduate Degree</td>
<td>40</td>
<td>50.6%</td>
</tr>
</tbody>
</table>
Participant Demographic Data continued (n=80)

<table>
<thead>
<tr>
<th>Variable</th>
<th>Value</th>
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</tr>
</thead>
<tbody>
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<td>Teaching Experience</td>
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<td></td>
</tr>
<tr>
<td>0-5 Years</td>
<td>45</td>
<td>57.03%</td>
</tr>
<tr>
<td>6-10 Years</td>
<td>10</td>
<td>12.7%</td>
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<tr>
<td>11-15 Years</td>
<td>15</td>
<td>19.0%</td>
</tr>
<tr>
<td>16-20 Years</td>
<td>3</td>
<td>3.8%</td>
</tr>
<tr>
<td>21 or more</td>
<td>6</td>
<td>7.6%</td>
</tr>
<tr>
<td>Classroom Setting</td>
<td>**</td>
<td>N=78</td>
</tr>
<tr>
<td>Community College</td>
<td>14</td>
<td>20.0%</td>
</tr>
<tr>
<td>Vocational School</td>
<td>9</td>
<td>12.9%</td>
</tr>
<tr>
<td>Public School District</td>
<td>15</td>
<td>21.4%</td>
</tr>
<tr>
<td>Career-Technical Education Center</td>
<td>14</td>
<td>20.0%</td>
</tr>
<tr>
<td>Educational Service Center</td>
<td>4</td>
<td>5.7%</td>
</tr>
<tr>
<td>Community Center</td>
<td>16</td>
<td>22.9%</td>
</tr>
<tr>
<td>Church</td>
<td>5</td>
<td>7.1%</td>
</tr>
</tbody>
</table>

*The percentage totals may not equal 100% due to rounding
**No mean computed for classroom setting. Some teachers taught at multiple sites. Their primary class setting may also be governed another institution listed.

Table 1 outlined this data with the mean scores, numbers, and percentage of participants. Most of the participants were female (M=1.82, SD=.42). Females represented 83.3% of participants; males represented 5.4%, and other represented 1.3%.

The average participant also earned a graduate degree (M=6.23, SD=.96). Those who earned a graduate degree are represented by 50.6% of educators in this study. The participants that have achieved a Bachelor’s degree and an educational license or certification represented 27.8% of the sample, though licensure specializations were not indicated. Those who only achieved a Bachelor’s degree represented 17.7%; 1.3% obtained an Associate’s degree, and 2.5% attended college, but did not earn a degree.

Most instructors in this study had under six years of teacher experience (M=1.92,
SD= 1.27) compared to the other groups of teachers who taught longer than six years.

For teaching experience, 57.03% indicated they have taught within the range of zero to five years; 19.0% have taught eleven to fifteen years, 12.7% taught six to ten years, 7.6% taught twenty-one years or more, and 3.8% sixteen to twenty years. The various types of settings in which instructors are teaching or have taught include: Community Center settings with 22.9% of the respondents; Career-Technical Education Centers represented by 20.0%; Public School Districts with 21.4%; Community Colleges represented by 20.0% of respondents; Vocational Schools with 12.9%, Churches with 7.1%, and Educational Service Centers represented by 5.7% of respondents. Most teachers in this study taught in community centers or satellite locations in neighborhoods.

Participants in this study included twelve males, sixty-five females, three full time instructors, sixty-eight part time instructors and eight volunteers that are also categorized themselves or work in the capacity of teaching. The teachers in this study delivered their instruction in settings that include community colleges, vocational schools, public school districts, career-technical education centers, churches, correctional facilities, and educational service centers. Some instructors taught in two or more locations and thus, traveled between sites where their teaching time may have varied at each site. The class structure in which the instructors teach is also diverse, with teachers having the freedom to teach whole group, tutor individually or both. For some ABLE programs, there are also single subject classes that instructors may teach, which include English for TESOL, Math for G.E.D. preparation, and Writing. There are classes where teachers tutor students individually in the same manner that tutoring is facilitated at programs with volunteer tutors.
Fifty-seven total programs were initially contacted to introduce the researcher, the research, and to inquire about potential teachers’ participation in the study. Five of the programs who were contacted initially to complete the quantitative surveys did not follow through to completion. Two program directors explained that there was not enough time available to participate. Due to the presumed time-consuming nature of survey participation, many tutors were also not available or did not extend extra time to complete both surveys, irrespective of follow-up e-mail reminder notices. Both surveys were also independent from each other, and sent from two separate links, one from the Hay Group, publisher of the Learning Styles Inventory and www.surveymonkey.com from which the ABLE Instructors as Adult Learners within Professional Development Survey was sent. Therefore, there were an unequal number of participants who completed the ABLE Instructors as Adult Learners within Professional Development Survey compared to the Learning Styles Inventory, which provided a low sample size to analyze.

Ten total ABLE programs agreed to participate. Seventy-five teachers, from the ten ABLE programs, responded via e-mail to answer questions on the two online questionnaires, the ABLE Instructors as Adult Learners Within Professional Development survey developed by the researcher and the Kolb Learning Styles Inventory (LSI) version3.1. Four additional ABLE programs were contacted six months later via telephone, due to the initial low response and participation rate of the ten initial programs. Two programs expressed interest in participation, from which one program consisting of four participants, completed the two surveys bringing the total number of participants to seventy-nine. One additional respondent completed the ABLE Instructors
as Adult Learners Within Professional Development Survey via a web link from www.surveymonkey.com, bringing the total number of participants to eighty.

Given the total number of instructors who participated in this study, sixty completed both surveys. Eighty instructors completed only the ABLE Instructors as Adult Learners Within Professional Development Survey. Seventy instructors completed the Learning Styles Inventory (LSI) version3.1.

There are ABLE programs in operation that do not receive the Adult Basic Literacy Instructional Grant. These programs receive grant funding from various foundations, private donations, and other sources to operate their programs. These financial resources cover cost for, but are not limited to the following: office equipment and supplies, staff, program personnel, building maintenance, and utilities. These particular sites that participated in this study are categorized as “tutoring sites,” where a site manager, program coordinator, or program administrator facilitates and maintains classroom management, and tutors deliver instruction to the student directly. Thirteen total programs participated in this study, which included two programs that operate as tutoring programs.

Tutors have varying approaches and perspectives in the classroom because they may not frequently view themselves solely as instructors as one is viewed or views themselves in a traditional classroom. In addition, these participants also assume other professional occupations and responsibilities while simultaneously providing literacy services to various organizations and agencies. However, because they also deliver instruction, their perspectives are and were significant to comprehending how teachers within the area of ABLE/ABEL literacy view themselves as professionals in the ABLE
classroom context. Tutors’ additional professional experience and expertise can be a supplementary benefit to the ABLE profession, advising various methods and best practices of which ABLE/ABEL instructors may be unaware, because of the supplementary knowledge, skills, and capabilities brought to the teaching arena that are not completely comprised of teaching.

Instrumentation

The instruments used for the research included the qualitative semi-structured interview, the *ABLE Instructors as Adult Learners Within Professional Development Survey*, and the *Learning Styles Inventory (LSI)* version3.1. The Kolb *Learning Styles Inventory (LSI)* version 3.1 was distributed to evaluate and categorize participant learning styles. The most recent version is the 205 revision from the original questionnaire developed by David A. Kolb (1971).

The assessment was used to identify how individuals learn from experience, more specifically, one’s “unique individual approach to learning” (Kolb & Kolb, 2005, p.8). The *Learning Styles Inventory* is a self-assessment non-criterion referenced instrument, not used for assigning treatment or assigning respondents to one category based on one test score (Kolb, 2005). In addition, the instrument enabled the study participants to “select learning approaches that work best for them in different learning situations” (Kolb, 2005, p.8). Continual professional education/professional development is the learning situation for this study.

The researcher also developed a questionnaire, *ABLE Instructors as Adult Learners Within Professional Development Survey*, to gather participant data. The four
major constructs analyzed from the survey included: learning styles categories, motivational factors that contribute to participation in continual professional education, professional development activity selection, and frequency of participation in continual professional education. Participants’ demographic data were also gathered, such as the amount of years participants have taught in ABLE, education level, and occupational setting have also been included to examine external motivational factors that pose influences on continuing professional education and professional development activity choice. The answer formats via which teachers answered included multiple choice, rating choices, ranking activity preferences, and open-ended text boxes for short answer/qualitative responses.

Open-ended qualitative responses were displayed in the exact form as the participant specified for question 18, “In what ways do you think professional development accommodates your learning style;” question 19 “In what ways do you think professional development ignores your learning style;” and question 21 “Please give an example of how your classroom instruction has changed as a result of having participated in professional development. If your classroom instruction has NOT changed as a result of professional development, please comment on why you think this is so.” Qualitative responses were then amassed based on parallel themes. Based on the responses to the ABLE Instructors as Adult Learners within Professional Development-Survey and the ABLE Instructor Dissertation Feedback Form, the qualitative interview questions were developed to evaluate more elaborate, detailed, informative responses that could better inform the academy of research.
Though the *ABLE Instructors as Adult Learners within Professional Development Survey* allowed participants to provide qualitative responses, more explanation and in-depth knowledge was necessary. Therefore, the twelve-question qualitative semi-structured interview was also developed to gather more in-depth input from ABLE instructors. The qualitative semi-structured interview provided data for triangulation and enabled respondents to provide more extensive perspectives. The qualitative semi-structured interview also allowed teachers an opportunity to elaborate on their responses and provide more in-depth, reflective replies. Teachers’ perspectives were valuable to unearth how decisions are made psychologically, professionally, and personally when choosing professional development activities, independent from external motivation. The interview also gave teachers a resource to describe and evaluate how years taught, gender, educational level and program setting have or do not have an influence on frequency of participation and the types of activities selected.

**Validity**

Validity is regarded as the extent to which concepts and questions are being adequately measured by an instrument. Construct validation is the extent to which a test looks at or encompasses a theory or construct (Kolb & Kolb, 2005) not focusing on end results. For the *ABLE Instructors as Adult Learners within Professional Development Survey*, questions were structured to capture input from instructors addressing issues related to learning styles, professional development, and to help develop the construct. The survey was drafted for this study. The survey underwent three phases of development. The questionnaire was drafted, sent to committee members for feedback,
and then re-written. The online version was sent to committee members for evaluation, then distributed to participants.

Inter-correlations were computed to measure whether scale items correlated with each other and the power of the correlation statistic. The r statistic was computed to determine the level of power. Table 2 displays correlation items for professional development activities in which instructors participated. Table 3 displays correlation items for professional development activities which instructors enjoyed. Table 4 displays correlations items for motivating factors.

Table 2
Inter-Correlation between Professional Development Participation Activities

<table>
<thead>
<tr>
<th>Items</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Workshop-ABLE Program</td>
<td>1.00</td>
<td>-0.098</td>
<td>0.196</td>
<td>0.305</td>
<td>0.081</td>
<td>0.137</td>
<td>0.295</td>
<td>-0.178</td>
</tr>
<tr>
<td>2. Workshops-NOT provided by ABLE program</td>
<td>1.00</td>
<td>0.239</td>
<td>0.407</td>
<td>0.130</td>
<td>0.115</td>
<td>0.470</td>
<td>0.240</td>
<td></td>
</tr>
<tr>
<td>3. College Courses (degree-seeking)</td>
<td>1.00</td>
<td>0.550</td>
<td>0.336</td>
<td>0.096</td>
<td>0.530</td>
<td>0.134</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. College Courses (non-degree)</td>
<td>1.00</td>
<td>0.290</td>
<td>0.249</td>
<td>0.566</td>
<td>0.025</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Online Courses</td>
<td>1.00</td>
<td>0.320</td>
<td>0.334</td>
<td>0.130</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. RCN/Alternative Delivery</td>
<td>1.00</td>
<td>0.345</td>
<td>0.008</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Conferences</td>
<td>1.00</td>
<td>0.322</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. Online/Social Networking</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tbody>
</table>

Table 3
Inter-Correlation between Professional Development Activity Enjoyment

<table>
<thead>
<tr>
<th>Items</th>
<th>1</th>
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<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Workshop-ABLE Program</td>
<td>1.00</td>
<td>-0.098</td>
<td>0.196</td>
<td>0.305</td>
<td>0.081</td>
<td>0.137</td>
<td>0.295</td>
<td>-0.178</td>
</tr>
<tr>
<td>2. Workshops-NOT provided by ABLE program</td>
<td>1.00</td>
<td>0.239</td>
<td>0.407</td>
<td>0.130</td>
<td>0.115</td>
<td>0.470</td>
<td>0.240</td>
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<tr>
<td>3. College Courses (degree-seeking)</td>
<td>1.00</td>
<td>0.550</td>
<td>0.336</td>
<td>0.096</td>
<td>0.530</td>
<td>0.134</td>
<td></td>
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</tr>
<tr>
<td>4. College Courses (non-degree)</td>
<td>1.00</td>
<td>0.290</td>
<td>0.249</td>
<td>0.566</td>
<td>0.025</td>
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</tr>
<tr>
<td>5. Online Courses</td>
<td>1.00</td>
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<td>0.334</td>
<td>0.130</td>
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<td></td>
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</tr>
<tr>
<td>6. RCN/Alternative Delivery</td>
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<td>0.345</td>
<td>0.008</td>
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</tr>
<tr>
<td>7. Conferences</td>
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<td>0.322</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>8. Online/Social Networking</td>
<td>1.00</td>
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<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
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Table 4
Inter-Correlation between Motivating Factors for Professional Development

<table>
<thead>
<tr>
<th>Motivation</th>
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<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
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<tr>
<td>1. Employer</td>
<td>1.00</td>
<td>.339</td>
<td>.158</td>
<td>.240</td>
<td>.196</td>
</tr>
<tr>
<td>2. Stipend</td>
<td>1.00</td>
<td>1.00</td>
<td>.147</td>
<td>.150</td>
<td>.121</td>
</tr>
<tr>
<td>3. Increasing Knowledge</td>
<td>1.00</td>
<td>1.00</td>
<td>1.00</td>
<td>.655</td>
<td>.596</td>
</tr>
<tr>
<td>4. New Techniques</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Helping Students</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1.00</td>
</tr>
</tbody>
</table>

The qualitative semi-structured interview was also sent to committee members, subject matter experts, to evaluate Content Validity. The Content Validation (Berg, 1995) process allowed the researcher to reevaluate and rewrite questions so that content could be adequately aligned with the construct being measured. After feedback was received, the interview was revised and used with participants, who completed interviews. To address and support internal validity, themes were returned to the informants to assess whether conclusions were accurate (Creswell, 1994).

**Reliability**

Reliability testing involves repeated testing that will produce the same result (Hinton, 2004). The *Learning Styles Inventory* has had three versions from 1971-2005. Version 3.1 was revised to include normative data and a means by which raw LSI scores could be converted to percentages. The instrument was evaluated with test-re-test reliability and Cronbach’s alpha (Kolb & Kolb, 2005).

Reliability testing was conducted for scale items on the *ABLE Instructors as Adult Learners within Professional Development Survey*. Items were investigated to assess
those items in relationship to the test (Hinton, 2004). Cronbach (1951) alpha levels were computed to measure internal consistency of scale items on the questionnaire. This process was facilitated to determine whether items consistently measured their corresponding constructs. Though Cronbach alpha levels of .80 or higher are ideal, Items 9 & 10 resulted in alpha levels greater than .70. Item 12 resulted in an alpha level of .67, which is acceptable. See Table 5. A 2-3 % level is desired for each item to increase alpha levels. If the following items for question 9 were deleted, alpha levels would increase by .02: Workshops provided by ABLE program and Online/Social Networking. If the following items for question 10 were deleted, alpha levels would increase by .06: Workshops provided by ABLE program and Online/Social Networking. If the following items for question 10 were deleted, alpha levels would increase by .04: Workshops NOT provided by ABLE program and Resource Center Networks/Alternative Delivery Options. Please see Table 6 for all items and alpha values.

Table 5
Reliability Values

<table>
<thead>
<tr>
<th>Items</th>
<th>Survey No.</th>
<th>Scale Mean</th>
<th>Scale SD</th>
<th>Mean Item Mean</th>
<th>Alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>Professional Development Activity</td>
<td>9</td>
<td>18.19</td>
<td>4.56</td>
<td></td>
<td>.71</td>
</tr>
<tr>
<td>Workshop-ABLE Program</td>
<td></td>
<td></td>
<td></td>
<td>3.02</td>
<td>.73</td>
</tr>
<tr>
<td>Workshops-NOT provided by</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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Reliability Values

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Reliability Values continued

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Data Collection

The process for data collection involved Sequential Mixed Methods to better understand the research problem and to use one method in an effort to support the
findings obtained with another method (Creswell, 2009). Both quantitative and qualitative research designs were used. The rationale for facilitating a mixed-method study was to use the qualitative process to seek further interpretation of, understand alternate views, and prove a range of inquiry for the quantitative method (Johnson & Christensen, 2008). The qualitative research for this study enabled the participants to share and “examine how they learn about and make sense of themselves and others” (Berg, 1985, p.7) in relationship to the constructs of learning styles, professional development activities, motivation for training participant, and teacher characteristics.

The Learning Styles Inventory and ABLE Instructors as Adult Learners within Professional Development-Survey questionnaires were used for quantitative data collection. Questionnaires were collected and given a code for each participant. A semi-structured interview was used for the qualitative data collection.

**Quantitative Data Collection**

Both instruments, the Learning Styles Inventory and ABLE Instructors as Adult Learners Within Professional Development were generated electronically and sent simultaneously to one hundred participants for efficiency, to protect the identity and responses of the participants from their respective administrators or a secondary collector, and to attempt to garner more honest feedback. The Learning Styles Inventory was sent electronically from the Hay Group publisher’s web site to each survey participant. Each participant’s e-mail was entered into the web site’s database individually, so the research could identify the respondents and track completion of the survey. However, individual answers on the survey from responders could not be seen. Survey completion and
learning styles outcomes were indicated on the Hay Group’s web site. Individual LSI assessment score reports were also sent to the researcher via e-mail in a PDF file format.

The Adult Learners Within Professional Development Survey was sent through an electronic survey site, www.surveymonkey.com. E-mails were also sent to participants to inform them of the paper survey option. However, only three participants directly expressed the preference for paper copies of the survey. Therefore, paper copies were generated and disseminated to these participants in person. The surveys were placed in two separate envelopes. The surveys were analyzed after manually entering the data into the online database using the researcher’s e-mail address, so that the information could be calculated with the data that was submitted electronically by previous participants. Cumulative results were then tabulated for each question.

Participant data was collected from teachers and tutors who work in diverse settings, which include, but are not limited to: community colleges, vocational schools, public school districts, career-technical education centers, churches, correctional facilities, and educational service centers. Each ABLE program was identified through the University Systems of Ohio/ABLE AWE listing, which provided the name, location, and institution type. An Adult Basic Literacy Education program directory, 2011/2012 was provided by the state ABLE director and used as a resource to contact each ABLE program. The directory lists and defines the four program regions, professional development resource networks, and individual programs within the state. All tutoring sites were identified through past encounters between researcher and site managers’ working relationships as partners in the ABLE field.
Some instructional sites are housed in the same facility as the administrative offices. Other instructional sites are situated at satellite locations distinct from their administrative headquarters. Space differentials that may have influenced distribution and collection of questionnaires to and from participants were remediated by sending two electronic surveys.

Each instructional site and respective program coordinator was contacted via telephone to discuss the nature of the research and purpose of the study. A follow-up e-mail was sent to garner permission to help disseminate the program consent form and survey to study participants confidentially. A program correspondence chart was established by the researcher to track calls made via telephone and notes regarding methods and measures for follow-up. A sample of the chart is included in Appendix A, with each program coded to protect the identity of the program.

An initial correspondence letter was then sent to all ABLE program coordinators and administrators, via e-mail, regarding the study. A permission letter explaining the rationale for the study and the process to protect the anonymity of the participant was also sent via e-mail and addressed to the corresponding programs. Codes were used to identify the respondents and their corresponding agencies. Participants were given a code for identification, as denoted by four initials. These initials included the first letters of participants’ first and last names preceding two to three initials that corresponded with their educational institution. Participants that had the same initials received a numeric character to distinguish individuals. This code enabled the researcher to track individuals’ completion of one or both surveys. A reminder e-mail was sent to participants to complete incomplete questionnaires. A follow-up e-mail was sent to
program directors to verify receipt of the surveys. Two professors with experience in ABLE literacy received an electronic link to a copy of the ABLE Instructors as Adult Learners Within Professional Development Survey created by the researcher to assess the face validity of the instrument (Muijs, 2004), and to inquire about any problems or issues regarding the survey.

A Conditional Use Agreement and a research grant application were submitted to the publisher, so that permission could be obtained to use Kolb’s Learning Styles Inventory. The review process proceeded for approximately two weeks. Then permission was granted via e-mail. An attached copy of the survey and the scoring guide was provided as an attachment to the e-mail. Instructors were then entered into the LSI site database, where electronic e-mails were generated. Each participant received an e-mail with a username and password for entry into the site where survey questions regarding learning styles could be answered. Participants also received feedback reports that outlined the purpose and structure of the assessment and learning styles’ outcome and results.

Respondents that completed the ABLE Instructors as Adult Learners Within Professional Development Survey online were identified by e-mail addresses that were entered into the online database, so that if they completed the survey, they could be identified. However, individual respondents could not be linked back to their respective responses. All responses were amassed electronically where responses were tabulated for each survey question, so they could be analyzed. Only 80 participants completed the ABLE Instructors as Adult Learners Within Professional Development Survey. This was
an insufficient number to complete quantitative analysis, so qualitative data was sought to expound on quantitative data.

**Qualitative Data Collection**

An e-mail was sent to all participants who responded to the quantitative survey. Thirteen teachers replied that they would participate in the qualitative interviewing process. Ten instructors were interviewed individually using a semi-structured interview. This allowed the researcher to gather more in-depth information and to expound on responses provided from *ABLE Instructors as Adult Learners Within Professional Development* survey, particularly qualitative responses. Interviews were also conducted to provide more depth to support the quantitative data, in order to gain the semantic context conveyed by the “informants” (Creswell, 1994, p. 151). Teachers were queried regarding learning styles, professional development participation, and improving the current professional development system. Instructors were sent a preliminary e-mail to confirm the meeting date for the interview and to present the questions for pre-meeting reflection. After confirmation, interviews were conducted via telephone and face-to-face because of varying teaching schedules, and because teachers could not be directly observed (Creswell, 1994) in post professional development program participation. Therefore, instructors engaged in a reflective process to provide summative and formative feedback regarding their experiences. A digital recording program was used to acquire and save the interview answers on a lap top computer. The researcher also manually notated responses as participants replied to questions. For phone conferences, the conference was placed on speakerphone so that responses could be amplified and recorded as the researcher manually notated responses. If responses were misunderstood,
participants were asked to provide additional information to expand their answers or to provide clarity for the researcher. To protect the identity of the interviewee, each participants’ interview saved in a Microsoft Word document, saved under initials for their first name, last name, class site, or program affiliation.

**Data Analysis**

**Quantitative Data Analysis**

The *Learning Styles Inventory* and *ABLE Instructors as Adult Learners within Professional Development Survey* were completed in order to analyze quantitative data. Quantitative data analysis was facilitated using the SPSS 18 statistical software package. Sixty instructors completed both questionnaires which included the *Learning Styles Inventory* and the *ABLE Instructors as Adult Learners within Professional Development Survey*. Seventy instructors completed the *Learning Styles Inventory*. There were a total of eighty instructors who completed the *ABLE Instructors as Adult Learners within Professional Development Survey*.

A data matrix, "IV-DV Matrix” (See Appendix D), was established to organize and identify research questions and corresponding survey questions, independent and dependent variables, and method of analysis for each question. The Matrix was revised after analysis was conducted to reflect the survey questions and analysis methods used after revision. There are four research questions that guided this study for which data analyses was conducted and reported.

*Research Question 1 What are the preferred learning styles of ABLE teachers?*

*Learning Styles Inventory* questions 1-12 were used to identify instructors’ learning styles. Some of examples of LSI response prompts include:
1. When I learn…
2. I learn best when…
3. I learn by…
6. When I am learning…
7. I learn best from…
9. I learn best when…

Choices were then ranked for each prompt according to qualities that were “most like” the participant to qualities that were “least like” participants. For example, for the prompt, “When I learn best”, responses include, “I like to deal with my feelings”, “I like to think about ideas”, “I like to be doing things”, and “I like to watch and listen”.

Descriptive statistics were reported to describe the percent of participants that comprise each learning style. Instructors were also engaged in an opportunity to identify and describe learning styles in response to questions on the qualitative interview. There were two questions to gain instructor information. Teachers were asked the following questions:

1. *How does or how would knowledge of learning styles help you as an ABLE-Adult Education professional?*

2. *Please describe what you have learned from the learning styles’ inventories or assessments you have taken in the past?*

3. *How would you describe your learning style?*

*Research Question 2 Is there a relationship between ABLE teachers’ preferred learning styles and the types of continuing professional education learning activities in which they participate?*
A One-Way ANOVA, Analysis of Variance, was conducted to compare the groups (Hinton, 2004) organized by learning style and to determine the potential differences among the four learning styles categories and the professional development activities chosen. Learning Styles, as identified by the Learning Styles Inventory, were the independent variables. Dependent variables were the professional development activity types described in Question Ten, “What types of professional development activities do you participate in most often?” and Question Eleven, “What other types of professional development would you participate in, if given the time and opportunity?” Qualitative data was also used to analyze this construct. The corresponding qualitative question used to analyze this question is, “Given your Learning Style(s), how might professional development best designed to serve you?”

*Research Question 3 is: What are the motivating factors that drive ABLE teachers to participate in continuing professional education?*

This corresponds with the survey question, “On a scale from 1-5, how much do the following factors play a role in motivating you to participate in professional development?” “If you did not receive a stipend, would you continue to participate in professional development?” “If you were not obligated to attend, would you continue to participate in professional development?” Analysis was completed with descriptive statistics, displaying choice outcomes. T-tests were conducted to examine the degree of motivation among factors, Employer, Stipend, Increasing Knowledge, Learning New Techniques, and Helping Students. A Pearson’s Correlation was later used to analyze the inter-correlation of motivating factors that influenced teacher participation.
Qualitative questionnaire responses were also used to address Question Three which include:

1. “What motivates you to participate in professional development?”

2. “What prevents you from participating in professional development?”

Research Question 4 Is there a relationship between ABEL teachers’ characteristics and their participation in continuing professional education?

A Regression was used to analyze Question 4. The independent variables are number of years taught, level of education, and total amount of paid work hours per week. The dependent variable for the fourth question is the frequency of participation in professional development/continuing professional education activities. This corresponds with the following inquiry: how frequently do you participate in professional development?

Qualitative questions were also used to analyze Question 4:

1. How does your teaching experience affect your professional development choices?

2. How does educational level affect your professional development choices?

3. How does classroom setting affect your professional development choices?

“Data analysis requires that the researcher be comfortable with developing categories…It also requires that the researcher be open to possibilities and see contrary or alternate explanations for the finding” (Creswell, 1994, p.153).

Qualitative Data Analysis

The researcher transcribed all qualitative data from recorded media first by typing each word stated by interviewees and saving each interview as a Microsoft Word document. Participant responses were then aggregated under each qualitative survey
question. A Content Analysis approach was used to analyze the data, where responses were reread and coding categories were derived from the text data. Words and phrases and highlighted to assess and determine emerging themes from responses, contingent on the frequency of statements in the text (Berg, 1995). A *Qualitative Participant Summary Document* was created, submitted to a committee member for feedback. The *Summary Document* was then re-read and revised again to build more succinct themes. All responses were reread then coded (Creswell, 2013) to describe major themes that emerged according to participant statements. A *Qualitative Themes Concept Map* document was then created which shows each construct and corresponding themes that aligned with those participant responses.
CHAPTER IV

RESULTS

This chapter will present the results of the analysis conducted in Chapter III. The purpose of this study was to look at the ABLE educator as an adult learner and reflective practitioner in professional development and continuing professional education. This research was guided by the following research questions:

1. What are the preferred learning styles of ABLE teachers?

2. Is there a relationship between ABLE teachers’ preferred learning styles and the types of continuing professional education learning activities in which they participate?

3. What are the motivating factors that drive ABLE teachers to participate in continuing professional education?

4. Is there a relationship between ABLE teachers’ characteristics and their participation in continuing professional education?
Preferred Learning Styles

Quantitative Results

The first question asked, “What are the preferred learning styles of ABLE teacher?” The Learning Styles Inventory (LSI) version 3.1 was administered to capture this data, completed by seventy instructors. The four learning style outcomes for the Learning Styles Inventory were Accommodator, Diverger, Converger, and Assimilator. Seventy participants completed the Learning Styles Inventory (LSI). Table 1 below displays the following numbers and percentages for the sixty total participants who completed the LSI 3.1. These participants also completed the Adult Learners Within Professional Development Survey. Please see Table 1 for the instructors who completed the LSI 3.1:

Table 7

Adult Learning Styles (N=60)

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<tr>
<th>Learning Style</th>
<th>N</th>
<th>Percent</th>
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</thead>
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<tr>
<td>Accommodating</td>
<td>15</td>
<td>25.0%</td>
</tr>
<tr>
<td>Assimilating</td>
<td>21</td>
<td>35.0%</td>
</tr>
<tr>
<td>Converging</td>
<td>13</td>
<td>21.7%</td>
</tr>
<tr>
<td>Diverging</td>
<td>11</td>
<td>18.3%</td>
</tr>
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</table>

The preceding table indicated that 35.0% of instructors were categorized as Assimilating, those that learn by thinking, watching, and listening. Assimilating learners are analytical and may observe through listening and thinking critically. Learners who use tactile or a “hands-on” approach to acquiring knowledge are represented by the Accommodating learning style with 25.0% of instructors. Accommodating learners also use their experiences to learn and act based on feelings. Converging learners, 21.7%, are
known to think and do, or apply ideas into practical situations. Convergers want to derive the practical from what is learned, so that it may be applied into the specific situation where needed. Divergers, 18.3% of instructors, use observation, feeling, and listening to learn. Divergers are also observant, using listening and feeling to learn, but may be regarded as information gatherers.

Instructors were also asked to identify their learning style on the *ABLE Instructors as Adult Learners Within Professional Development Survey*. Approximately 74.0% respondents indicated their knowledge about learning style. The percent of instructors who stated they did not know what their learning styles were, as denoted by selecting “no,” was 2.7%, and 23.3% selected the option of “uncertain.” Please see Figure 1.

*Figure 1 Results of ABLE Instructors as Adult Learners Within Professional Development Survey- Knowledge of Learning Styles*

**Q16** Do you know what your learning style is? If you know or think you know what your learning style is, please describe in the comment field below:

Answered: 73  Skipped: 7
When prompted to describe their learning style in the “Comment” field, various responses were provided using “Multiple Intelligence” (Gardner, 1999) definitions. For example, twenty-three instructors described their style as “visual;” three described themselves as “auditory;” and twenty-three people described themselves as having a combination of styles, or “blend of different types” such as “auditory-visual,” or “tactile and visual.” Respondents also made statements such as: “I learn best by combining visual, auditory, and tactile,” “I like to read, hear something explained, observe how it is used, and be mentored in my use of it,” “I learn in all these ways individually, as well, but I learn best using all four ways in combination.” One participant stated that their learning style was contingent on the “curriculum” they learned. Another instructor stated that their learning has changed as they have aged. There were other respondents who replied that they did not know their learning style.

The ABLE Instructors as Adult Learners Within Professional Development Survey indicated that 91.03% of participants stated they believe professional development aided them in becoming more knowledgeable as adult learners, as indicated by a “yes” response. Individuals who did not believe they became more knowledgeable, 8.97%, selected a “no” response. Please see Figure 2.

Figure 2 Results of ABLE Instructors as Adult Learners Within Professional Development Survey- Professional Development Helping Knowledge as an Adult Learner
Though survey participants indicated the awareness or lack of awareness of their learning styles, they were not asked what assessments were used to describe those styles on the ABLE Instructors as Adult Learners Within Professional Development Survey. The prompt was inconclusive and did not provide sufficient discussion and description of how learning styles were measured and determined. The qualitative interview was then used to collect data to expound on information about participant learning style conceptualizations in an attempt to further explain and understand quantitative findings.

**Qualitative Results**

Ten instructors completed the qualitative interview. The qualitative interview was facilitated and involved the following question regarding learning style, “How does or how would knowledge of learning styles help you as an ABLE-Adult Education professional?” Instructors stated that knowledge of learning styles would help them with
“knowing (their) your strength,” “incorporate all the senses” because “not every person learns the same.” The most present and prominent theme with all responses was helping students (“meet student needs”). Instructors also believed with learning styles awareness came improvement as teachers and connecting with students because instructors could “better communicate with students” and “get all learners.” Another quote provided reasoning for this, because “otherwise as an adult learner you’ll lose them.” Comments also included “you need to understand what your learning style is, by making connections to (student) learning styles” and to be “keen to other types of learning.” Instructors also stated that awareness of learning styles helps or helped them become “better organized” and “provide a more dynamic approach to instruction.” Instructors, therefore spoke to their experiences as they connected with themselves as learners in order to best serve the learners with which they worked. There are four initial categories that were derived from reading and analyzing instructors’ comments describing how learning styles would help them as adult education professionals. They are “helping students,” “organization” in the classroom, awareness of “learning styles,” and improving “instruction.”

Instructors were also asked to “Describe what you have learned from the learning styles’ inventories or assessments you have taken in the past.” Instructors’ responses indicated that they were aware of themselves, strengths, weaknesses, communication styles, learning styles, information processing, and the teaching-learning transaction. When queried about how they would describe their learning styles, “How would you describe your learning style(s),” instructors identified four specific styles such as visual, interpersonal, auditory, and kinesthetic. Four instructors stated their learning style as
visual, one described themselves as interpersonal, four instructors described themselves as kinesthetic, and one instructor categorized themselves as “assimilating.”

Instructors discussed how awareness of learning styles would help them as teachers, what they have learned about themselves from learning styles’ inventories, and models they believed represented their learning style. Based on the final evaluation of the qualitative data, “Learning Styles Identification” and “Teacher Self-Awareness” were the two categories that emerged and developed from the qualitative data.

Preferred Learning Styles and Professional Development Activity Type

Quantitative Results

Research question two asked, “Is there a relationship between ABLE teachers’ preferred learning styles and the types of continuing professional education learning activities in which they participate?” There were three survey items used to address this construct. Participants were asked, “Do you think about your learning styles when choosing professional development activities?” In response to this question, only 15.6% stated that they significantly thought about their learning style when choosing professional development activities. In addition, 50.6% (“somewhat”) thought about learning styles less often, and 33.8% stated they did not think about learning styles at all. However, when asked about using learning styles to determine which professional development activities will be chosen, only 10.3% stated “significantly,” 53.8% used their styles less often, as defined by “somewhat,” and 35.9% stated they did not use learning styles, as indicated by selecting, “not at all.” Please see Figure 3.
Figure 3 Results of ABLE Instructors as Adult Learners Within Professional Development Survey - Learning Style Use and Professional Development Choices

Q18 Do you use your learning styles to determine which professional development activity you will choose?

Answered: 78 Skipped: 2

There are various types of professional development activities in which ABLE instructors participate. In this study, these included, but were not limited to: workshops (sponsored by the ABLE/ABEL program or independent providers), college courses, online courses, Resource Center Network workshops, Alternative Delivery Options, and Social Networking. The most “Frequently” attended activities were provided by the ABLE program according to the ABLE Instructors as Adult Learners Within Professional Development survey 38% (N=27). Please see Figure 4. However, the greatest number of participants (N=37, 53.6%) were those who attended Alternative Delivery Options through the Resource Center Network workshops. Based on the ABLE Instructors as
Adult Learners Within Professional Development survey, both non-ABLE workshops and conferences were identified as the most enjoyable activities (enjoyed “extremely well”), as indicated by 22.5% (N=15). Please see Figure 5. Though RCN’s and ABLE program workshops had greater participation, teachers enjoyed other activities, such as workshops that were not provided by their ABLE programs (N=25, 37.3%) or conferences (N=22, 32.8%).

Figure 4 Results of ABLE Instructors as Adult Learners Within Professional Development Survey- Professional Development Activity Frequency of Participation
Mean scores were reported for each learning styles group and professional development activities. For learning styles Accommodating, Assimilating, Converging, and Diverging, the mean scores differed. Values 2.50 and above represented a positive relationship between activity and learning styles. Values below 2.50 represented a negative relationship between activity and learning styles. Accommodating, “hands-on” learners consistently had the highest mean score outcomes among all learning styles.
groups for each set of professional development activities, though not a substantial range between highest and lowest score. However, with to respect professional development activities, though Accommodators had the highest mean score for Workshops Provided by the ABLE Program, mean scores for Non-Degree Seeking College Courses indicated only a slight positive relationship between this activity and the Accommodating learning style. In addition, Non-Degree Seeking College Courses had negative relationships among the activity and the Assimilating, Converging, and Diverging learning styles. Online/Social Networking had negative relationships among all learning styles groups.

Accommodators had the highest mean score (M= 3.47, SD= .92) for Workshops provided by the ABLE Program. Activities with mean scores demonstrating a positive relationship for Accommodating learning styles are as follow: Workshops NOT provided by the ABLE program (M= 3.17, SD= .94), Non-Degree Seeking College Courses (M=2.54, SD= .88), Online Classes/Courses (M= 2.67, SD= .98), Resource Center Networks (M=2.92, SD =.64), and Conferences (M= 2.93, SD= .64). However, Accommodators resulted in a mean score of 2.17 (SD=1.11) for the Online/Social Networking activity, which indicated a negative relationship. Accommodators’ second highest mean score aligned with Workshops Not Provided by the ABLE Program. Please see Table 8.
Table 8 *Preferred Learning Styles and PD Activity Type*- Mean Scores

<table>
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<th>Learning Style</th>
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<td>Assimilating</td>
<td>1.50</td>
<td>.76</td>
</tr>
<tr>
<td></td>
<td>Converging</td>
<td>1.67</td>
<td>1.12</td>
</tr>
<tr>
<td></td>
<td>Diverging</td>
<td>1.38</td>
<td>.74</td>
</tr>
<tr>
<td><strong>College Courses</strong></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>(Non-Degree Seeking)</td>
<td>Accommodating</td>
<td>2.54</td>
<td>.88</td>
</tr>
<tr>
<td></td>
<td>Assimilating</td>
<td>1.50</td>
<td>.85</td>
</tr>
<tr>
<td></td>
<td>Converging</td>
<td>1.67</td>
<td>.87</td>
</tr>
<tr>
<td></td>
<td>Diverging</td>
<td>1.50</td>
<td>.76</td>
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<tr>
<td><strong>Online Classes/Courses</strong></td>
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<tr>
<td></td>
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<td>.98</td>
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<tr>
<td></td>
<td>Assimilating</td>
<td>2.27</td>
<td>1.03</td>
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<td></td>
<td>Converging</td>
<td>2.22</td>
<td>.97</td>
</tr>
<tr>
<td></td>
<td>Diverging</td>
<td>2.44</td>
<td>1.13</td>
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<td><strong>Resource Center Network</strong></td>
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<td></td>
</tr>
<tr>
<td>/Alternative Delivery</td>
<td>Accommodating</td>
<td>2.92</td>
<td>.64</td>
</tr>
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<td></td>
<td>Assimilating</td>
<td>2.74</td>
<td>.87</td>
</tr>
<tr>
<td></td>
<td>Converging</td>
<td>2.33</td>
<td>1.15</td>
</tr>
<tr>
<td></td>
<td>Diverging</td>
<td>2.80</td>
<td>1.03</td>
</tr>
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<td><strong>Conferences</strong></td>
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<td></td>
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<tr>
<td></td>
<td>Accommodating</td>
<td>2.93</td>
<td>.83</td>
</tr>
<tr>
<td></td>
<td>Assimilating</td>
<td>2.25</td>
<td>1.06</td>
</tr>
<tr>
<td></td>
<td>Converging</td>
<td>2.55</td>
<td>.93</td>
</tr>
<tr>
<td></td>
<td>Diverging</td>
<td>2.33</td>
<td>.87</td>
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<tr>
<td><strong>Online/Social Networking</strong></td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>Accommodating</td>
<td>2.17</td>
<td>1.11</td>
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<td></td>
<td>Assimilating</td>
<td>1.77</td>
<td>.83</td>
</tr>
<tr>
<td></td>
<td>Converging</td>
<td>1.57</td>
<td>1.13</td>
</tr>
<tr>
<td></td>
<td>Diverging</td>
<td>1.44</td>
<td>.88</td>
</tr>
</tbody>
</table>

*2.50 and above represents a positive relationship to learning style; below 2.50 represents a negative relationship to learning style*
Table 9
*One-Way ANOVA for Learning Styles & Professional Development Activity Type (N=54)*

<table>
<thead>
<tr>
<th>Professional Development Activity</th>
<th>df</th>
<th>SS</th>
<th>MS</th>
<th>F</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Workshops - Provided by ABLE Program</td>
<td>3</td>
<td>8.43</td>
<td>2.81</td>
<td>3.23</td>
<td>0.03*</td>
</tr>
<tr>
<td>Workshops - NOT Provided by ABLE Program</td>
<td>3</td>
<td>2.84</td>
<td>0.95</td>
<td>1.07</td>
<td>0.37</td>
</tr>
<tr>
<td>College Courses (Degree Seeking)</td>
<td>3</td>
<td>6.27</td>
<td>2.09</td>
<td>2.05</td>
<td>0.12</td>
</tr>
<tr>
<td>College Courses (Non-Degree Seeking)</td>
<td>3</td>
<td>9.16</td>
<td>3.05</td>
<td>4.25</td>
<td>0.01*</td>
</tr>
<tr>
<td>Online Classes/Courses</td>
<td>3</td>
<td>1.42</td>
<td>0.47</td>
<td>0.45</td>
<td>0.72</td>
</tr>
<tr>
<td>Resource Center Network/Alternative Delivery</td>
<td>3</td>
<td>2.39</td>
<td>0.80</td>
<td>0.93</td>
<td>0.44</td>
</tr>
<tr>
<td>Conferences</td>
<td>3</td>
<td>3.82</td>
<td>1.28</td>
<td>1.44</td>
<td>0.24</td>
</tr>
<tr>
<td>Online/Social Networking</td>
<td>3</td>
<td>3.11</td>
<td>1.04</td>
<td>1.07</td>
<td>0.37</td>
</tr>
</tbody>
</table>

*Note.* For Sums of Squares reported, Between Groups differences are listed, then Within Group differences

*p<.05*

The ANOVA analysis was conducted for learning styles and preferred professional development activities to determine if statistically significant differences existed amongst learning style groups. F-score outcomes demonstrated that differences
existed between learning style groups for professional development activities chosen such as workshops provided by the ABLE program and non-degree seeking college courses. Non-Degree Seeking College Courses produced the highest statistical significance when the ANOVA was conducted for all learning style groups. Please see Table 9. More specifically, the results indicated statistically significant differences existed among learning style groups in terms of their choice of activities, such as workshops provided by the ABLE program \[F(3, 49) = 3.23, p=.03\] as well as college courses (non-degree seeking) \[F(3, 40) = 4.25, p=.01\] as preferred professional development activities. The College Course Degree Seeking activity \[F(3, 44) = 2.05, p=0.12\] was not statistically significant among learning style groups. Conference activity outcome scores were \[F(3, 46) = 1.44, p=0.24\], which were also not statistically significant. Workshops not provided by the ABLE Program showed the following results: \[F(3, 46) = 1.07, p=0.37\]. Online/Social Networking had the lowest mean score for Accommodating learning styles with ANOVA results as follows: \[F(3, 37)= 1.07, p=0.37\]. Resource Center Networks and Alternative Delivery Options had the following results: \[F(3, 50) = 0.93 p=0.44\]. Online Classes and Courses produced the results that indicate the least degree of differences between learning style groups: \[F(3, 41) = 0.45, p=.72\].

A post-hoc comparison using the Tukey HSD test was conducted for Workshops provided by the ABLE program and Non-Degree Seeking College Courses to determine if specific differences existed among learning style groups. There were no significant differences between learning style groups for Workshops at \(p < .05\). However, results from the post hoc comparison indicated significant differences between learning style groups: Accommodating compared to Assimilating \((p=.01)\) and Accommodating
compared to Diverging (p=.05) for Non-degree Seeking College Courses (p=.01) at the p<.05 level. An a-priori sensitivity analysis was conducted for the ANOVA model using G-Power (Hinton, 2004). Given the sample size (N=54), a value of 0.32 was required to get a 0.8 the minimum acceptable value. After the ANOVA was completed, the Effect Size was calculated at 0.24, close to 0.32. However, the outcome fell short of the acceptable effect size to achieve the desired power, demonstrating a low strength in the relationship of the variables. Thus, qualitative data was used to explore additional findings.

Ninety-one percent of participants in this study believed professional development aided them as adult learners. The greatest number of participants (N=37, 53.6%) were those who attended Alternative Delivery Options through the Resource Center Network workshops, but non-ABLE workshops and conferences were identified as the most enjoyable activities. However, only 15.6% thought about learning styles, and 10.3% stated they used learning styles to inform professional development choices. Non-Degree Seeking College Courses and Workshops Provided by the ABLE program were the most statistically significant chosen activities. Although professional development was stated as being helpful and learning styles were not often acknowledged, the semi-structured interview was used to learn and further clarify and advise how training could be informed by incorporating learning styles when developing professional development activities. In addition, the qualitative interview was developed to garner more in depth information regarding teachers’ perspectives on enhancing training to inform professional practice by connecting with learning styles.
Qualitative Results

The qualitative questionnaire asked “Given your learning styles, how might professional development be designed to best serve you?” Participants identified the need for applying learning styles for the benefit of using them to develop PD. For example, responses included, “…I think knowledge of that (learning styles) would motivate professional developers to be more dynamic in their approach to PD” and “people will remember best with as many sensory channels as possible.” Additional comments included, “professional development directly impacts and is impacted by the fact that I’m a visual learner. I need to be able to see something. I need to be able to read it,” “using a variety of approaches is a great way to go,” “I think in our professional development that we do need more hands-on (activities),” “A lot of times, just sitting and listening doesn’t work for me,” and “I primarily participate in professional development that utilizes webinars where I can hear information.”

In addition, evaluations were stated as being informative in professional development program construction. Comments included, “Assessments are important to determine what type of people you would be dealing with,” “They (PD developers) have to do better job of assessing,” “focus on the needs and objectives of the learners,” “You have to know your audience.” Other instructors noted, “Inventories provide personal insight for the teacher” and “There should be a survey to find out where you are, and at the second one, or third one, so, adjustments are made to meet the needs of everybody, as opposed to a one blanket workshop that fits everybody, because it doesn’t.”

In addition, informants stated the need to increase instructors in planning process to “help plan out training.” These responses however, were connected to the following
interview question: “How would you improve the current professional development system for ABLE educators?” Responses included: “get involvement of instructors,” “instructors should be more involved as a part of it, in the selection of the different activities that are a part of our professional development because the instructor is the one who knows what’s going on in the classroom.”

Instructors provided critiques of or statements about former professional development activities in which they engaged. For example comments included, “A lot of times just sitting and listening to something doesn’t work for me,” “current professional development usually uses PowerPoint then facilitation of activities,” and “A lot of times our professional development is just dictated to us.” Another instructor noted, “We just end up with talking head at the front of the room going on ad nauseam about what they know.”

Participant statements were read, re-read, and evaluated to assess common themes that occurred. The themes that emerged from the interviews included: “benefit of learning styles,” “assessments,” and “improving professional development.” The final themes for question two is “Learner Assessments –Pre-Professional Development Program Construction,” “Improving Professional Development Program Delivery & Structure,” and “Benefit of Learning Styles.”

Motivation and Professional Development Participation

Quantitative Results

Research question three asked, “What are the motivating factors that drive ABLE teachers to participate in continuing professional education?” The ABLE Instructors as Adult Learners Within Professional Development Survey prompted instructors to rate the
role certain factors played in motivating them to participate in professional development, such as encouragement from their employer, receiving a stipend, opportunities to increase knowledge, learning new instructional techniques, and helping students to increase skills. However, out of all of the factors, 56.3% of instructors were extremely motivated to help their students when making professional development choices. With respect to primary motivation, 48.8% wanted to learn new instructional methods, 47.5% wanted to increase and strengthen their knowledge, 16.3% were mostly motivated by receiving a stipend, and 26.3 were extremely motivated by encouragement from their employers. Please see Figure 6.

Figure 6 Results of ABLE Instructors as Adult Learners Within Professional Development Survey - Motivating Factors for Professional Development Participation I

Q13 On a scale from 1-5, how much do the following factors play a role in motivating you to participate in professional development?

Answered: 79  Skipped: 1
Stipends was also presented as an option on the questionnaire to assess if this form of external motivation would prompt or encourage teacher motivation. However, when queried about continuing professional development if no stipend was received, 70.9% stated they would continue participation, compared to 25.3% who were “uncertain,” and 3.8% who indicated they would not continue, as denoted by their selection of the “no” option on the ABLE Instructors as Adult Learners Within Professional Development Survey. Please see Figure 7.

Figure 7 Results of ABLE Instructors as Adult Learners Within Professional Development Survey- Motivating Factors for Professional Development Participation II Receiving a Stipend

Q14 If you did not receive a stipend, would you continue to participate in professional development activities?

Answered: 79  Skipped: 1
When asked if they would continue participation if they were not obligated or mandated to attend professional development training, 79.5% indicated “yes,” they would continue, 16.7% stated they were “uncertain,” and 3.8% who stated they would not participate.

Please see Figure 8.

Figure 8 Results of ABLE Instructors as Adult Learners Within Professional Development Survey- Motivating Factors for Professional Development Participation III-Obligation

Q15 If you were not obligated to attend, would you continue to participate in professional development activities?

Answered: 78  Skipped: 2

Descriptive statistics were used to analyze question three. Table 10 delineates the following factors as they relate to the corresponding levels of motivation to the reasons for professional development participation. Please see Table 10.
Table 10  
*Motivating Factors* (N=79)

<table>
<thead>
<tr>
<th>Degree of Motivation</th>
<th>None</th>
<th>Very Little</th>
<th>Some</th>
<th>Mostly</th>
<th>Extremely</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employer</td>
<td>7 (8.8)</td>
<td>8 (10)</td>
<td>21 (26.3)</td>
<td>21 (26.3)</td>
<td>21 (26.3)</td>
</tr>
<tr>
<td>Stipend</td>
<td>9 (11.3)</td>
<td>7 (8.8)</td>
<td>21 (26.3)</td>
<td>27 (33.8)</td>
<td>13 (16.3)</td>
</tr>
<tr>
<td>Increasing Knowledge</td>
<td>1 (1.3)</td>
<td>2 (2.5)</td>
<td>8 (10)</td>
<td>30 (37.5)</td>
<td>38 (47.5)</td>
</tr>
<tr>
<td>Learning New Techniques</td>
<td>2 (2.5)</td>
<td>12 (15.0)</td>
<td>25 (31.3)</td>
<td>39 (48.8)</td>
<td></td>
</tr>
<tr>
<td>Helping Students</td>
<td>2 (2.5)</td>
<td>3 (3.8)</td>
<td>28 (35.0)</td>
<td>45 (56.3)</td>
<td></td>
</tr>
</tbody>
</table>

With regard to extreme motivation, the highest percentage (56.3%) of instructors were motivated by “Helping Students” while the fewest instructors (16.3%) reported being motivated by receiving a “Stipend.” “Stipend” (11.3%), however, received the most responses for not being the primary motivating factor in choosing professional development. Instructors were also motivated by “Learning New Techniques” (48.8%) and “Increasing Knowledge” (47.5%).

A Pearson Correlation was also executed to further examine statistical significance with motivating factor(s) variables. The variables included Employer Motivator, Stipend Motivator, Increasing Knowledge, Learning New Techniques, and Helping Students. Each output correlation values and significance levels were rounded to the nearest hundredth.
The findings from the Pearson Correlation suggested that numerous predictors were significantly correlated with respect to the ABLE teachers’ motivation for participating in professional development. When considering the $r^2$ values for each statistically significant correlations, the finding of this study found four main predictors with respect to the power of motivating factors. First, the findings suggest that the motivation of the employer is significantly related to all of the other potential motivations listed. Stipend Motivation represented 12% of the predictive value regarding the Employer Motivator factor. Second, the findings suggest that 24% of the explained value for the Employer Motivator variable is predicted by the other four variables: Stipend Motivator factor ($r^2=.12$), Increasing Knowledge factor ($r^2=.03$), Learning New Techniques factor ($r^2=.06$), and Helping Students factor ($r^2=.04$). Third, the findings of this study suggest that the Learning Techniques variable ($r^2=.44$) and Helping Students ($r^2=.36$) represents 80% of the predicted value for the Increasing Knowledge variable. Finally, the findings suggest that nearly all of the explained value for Helping Students is predicted by the Learning New Techniques factor ($r^2=.66$) and Increasing Knowledge factor ($r^2=.36$). The Employer Motivator variable is only represented 4% of the explained value for Helping Students.

Furthermore, the findings demonstrate the strength of the relationship of the variables; whereas, stipend motivation and employer motivation were highly correlated, though instructors were motivated least by these individual variables. The Increasing Knowledge variable had a greater relationship to Helping Students than Learning New Techniques; Learning Techniques had the highest relationship to Helping Students. Thus, though helping students was the primary motivator for professional development
participation, instructors also wanted to increase their knowledge and learn additional instructional methodologies to help their students. Please see Table 11.

Table 11

*Bivariate Correlations Among Motivating Factors (N=79)*

<table>
<thead>
<tr>
<th>Motivating Factors</th>
<th>Employer Motivator</th>
<th>Stipend Motivation</th>
<th>Increasing Knowledge</th>
<th>Learning New Techniques</th>
<th>Helping Students</th>
</tr>
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<tbody>
<tr>
<td></td>
<td>Mean Score</td>
<td>Correlation</td>
<td>Significance</td>
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<tr>
<td>Employer Motivator</td>
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<td>.00**</td>
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<td>.24</td>
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<td>Stipend Motivation</td>
<td>3.36</td>
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<td>Increasing Knowledge</td>
<td>4.29</td>
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<td>.66</td>
<td>.00**</td>
<td>.60</td>
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<tr>
<td>Learning New Techniques</td>
<td>4.27</td>
<td></td>
<td>.00**</td>
<td>.81</td>
<td>.00**</td>
</tr>
<tr>
<td>Helping Students</td>
<td>4.46</td>
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<td></td>
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</table>

* p<.05, **p<.01

Qualitative Results

There were two questions on the qualitative questionnaire that revealed more extensive responses for various motivating factors used to make professional development choices: “What motivates you to participate in professional development?” and “What prevents you from participating in professional development?” The *ABLE Instructors as Adult Learners Within Professional Development Survey* results indicated that “Helping Students” was regarded as being extremely motivating as indicated by 56.3% of favorable responses, “Learning New Techniques” being second to that with 48.8% favorable responses, and “Increasing Knowledge” being “mostly” motivating with 37.5% of favorable responses. For interviewee motivation, there were responses
that supported these constructs as being motivating factors for participation in professional development.

There were several quotes that indicated that helping students was one of the principal motivators for PD participation. One instructor stated, “I want my students to really learn and grow.” Another instructor noted, “I think about it in terms of the benefit and value of the student.” Also, “areas that would help me to better understand our learners” was an indicator for how they chose certain topics for activities in which they decided to engage. One reflection also included, “what can I involve myself in to ultimately help the student.” Other comments stated, “Even when you do stuff yourself, it ultimately influences the students,” “give best to my student,” and “I want to learn all I can in order to better serve my students.”

There were also statements that demonstrated teachers’ love of learning and desire to increase knowledge as motivating factors, though many primary objectives were to aid students’ learning. For example, teachers made comments such as, “So professional development for me is learning more today about something than I did yesterday,” “a love of learning,” “I want to know all I can,” and the need to “find out what’s new out there.” One instructor advised that it was important to “stay abreast of topics and issues” significant in their field of Adult Basic Literacy Education. Another instructor concurred with the previous quote by stating, “Things change…I always need to be abreast.” Another instructor noted, “I participate in professional development because I want to be the best in my field.”

Instructors were not only motivated to increase their knowledge for themselves and their students, but also noted the importance of improving their instruction.
Therefore, learning new teaching techniques was also an outcome from the themes that were generated from participant responses. For example, one instructor stated, “so my hope is always that PD will teach me something to help me be a more effective instructor.” Another teacher stated the need to understand, “how I can communicate more clearly and precisely” to students with which they worked. The need to “find out what’s new out there,” and “stay abreast of topics and issues” were other quotes that supported this notion. Finally, another interviewee stated, “I look at what am I teaching and how do I teach” to influence their activity choices.

These outcomes also support the quantitative findings. The qualitative findings suggest that instructors not only wanted to independently increase their current knowledge, learn more, and help students, but also wanted to learn methodologies or increase instructor knowledge to help students. The following categories summarize reasons that elicited participation: “helping students,” “increasing knowledge,” and “learning new techniques.”

On the contrary, though instructors made note of their desire to participate, time posed a barrier with regard to actual engagement in activities. For example, two teachers noted, “I wish I could attend more PD programs and projects offered, but time is an issue” and “Though I enjoy face to face, that would prevent me because of the time factor.” Other instructors stated they were “overwhelmed with classroom hours, not having the balance” and “the biggest obstacle is time.” Time not only posed a barrier when negotiating how choices were made, but also with respect to examining the utility of a topic. For example, instructors noted, “If I don’t see the usefulness in it, it’s just not the most efficient use of my time,” “if I feel it’s too complex, complicated. If I feel I
can’t apply it right away,” “I definitely look at time. If it’s all day 9-4, I’ll then look at the content and what’s presented, but mainly for me, the very first thing I look at is time. That will determine if I pursue that exercise or not.”

Though the question regarding barriers was not posed directly on the quantitative questionnaire, time and topic were implied elements that instructors use in decision-making when attempting to choose the most beneficial professional development activity and method of delivery. In sum, if the instructors believed the subject of the workshop would effectively use their time, positively impact instruction in the classroom for students, and enhance their role as a teacher, they would engage in the workshop or PD activity.

**Teacher Characteristics and PD Participation**

**Quantitative Results**

Examining teacher characteristics as it relates to professional development choices was also explored in this research. The fourth research question asked, “Is there a relationship between ABLE teachers’ characteristics and their participation in continuing professional education?” The variables considered for defining teacher characteristics were teaching experience, educational level, and gender. The first construct used to identify teacher characteristics was gender. Gender was categorized into three groups, females, males, and other for those that would choose to otherwise define themselves. The numbers for females, males, and other instructors respectively are sixty-four, twelve, and one. Females represented 83.3% of participants; males represented 15.4%, and other represented 1.3%. Figure 9 displays this data.
The participants that have achieved a Bachelor’s degree and an educational license or certification represented 27.8% of the sample, though licensure specifications were not indicated. Those who only achieved a Bachelor’s degree represented 17.7%; 1.3% obtained an Associate’s degree; and 2.5% attended college but did not earn a degree. A majority (50.6%) indicated they have attained a graduate degree. The ABLE Instructors as Adult Learners within Professional Development Survey did not provide instructors with an opportunity to specify the type of credential or licensure obtained.
For example, within the K-12 grade systems, there are subject area specifications and grade level licensure areas. However, ABLE teachers were only asked the time length of their teaching experience, but not subject area expertise or licensure. Figure 10 displays this data. See Figure 10.

Figure 10 Results of ABLE Instructors as Adult Learners Within Professional Development Survey - Teacher Characteristics - Level of Education

Q4 What is the highest level of school you have completed or the highest degree you have received?

Answered: 79  Skipped: 1

For teaching experience, 57.03% indicated they have taught within the range of zero to five years; 19.0% have taught eleven to fifteen years; 12.7% taught six to ten years; 7.6% taught twenty-one years or more; and 3.8% sixteen to twenty years. Figure 11 shows the results. See Figure 11.
A Simple Linear Regression was used to analyze the relationship between teachers’ individual characteristics and PD participation. The variables examined included level of education, gender, and teaching experience. According to the findings, the change observed in the frequency of participation could not statistically be explained by gender or level of education. Upon conducting a Regression using this model, gender was very insignificant. Gender was then removed to improve the overall model.

Seventy-nine teachers responded to the open-ended question regarding work hours on the *ABLE Instructors as Adult Learners Within Professional Development*
Survey. Over half of these teachers worked less than thirty hours. Upon conducting a regression analysis with the final model, the total hours or time for which teachers were paid, as denoted by “work hours” was statistically significant, (β=.227, p=.003). Thus, time as identified as “work hours” is the most significant deciding factor when instructors negotiate their ability and availability to engage in PD.

However, an increase in teaching experience (number of years teachers taught) nor an increase in level of education results in an increase in professional development participation. In addition, the R-Squared value (R²=.155) indicates that 15.5% of the variability in PD participation can be explained by the combination of the instructor’s work hours, teaching experience, and level of education. Table 12 below delineates the Regression data.

Table 12

<table>
<thead>
<tr>
<th>Variable</th>
<th>B (SE)</th>
<th>β</th>
<th>t</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teaching Experience</td>
<td>-.069 (.091)</td>
<td>-.086</td>
<td>-.754</td>
<td>.453</td>
</tr>
<tr>
<td>Work Hours</td>
<td>.227 (.072)</td>
<td>.351</td>
<td>3.131</td>
<td>.003**</td>
</tr>
<tr>
<td>Level of Education</td>
<td>-.432 (.281)</td>
<td>-.173</td>
<td>-1.535</td>
<td>.129</td>
</tr>
</tbody>
</table>

R²=.155
**p<.01

Qualitative Results

The qualitative interviews were conducted after the quantitative Regression analysis. The relationship of work hours to PD participation was not a question on the
qualitative interview regarding teacher characteristics. Teachers were not asked specifically if work hours influenced professional development choices. However, the positive relationship between work hours and PD participation is consistent with qualitative findings described by teachers’ primary motivational desire to help students with whom they spend significant time. In addition, teachers also verbally expressed their desire to participate (“I wish I could attend more”) and to find practical relevance, irrespective of the time needed to fulfill the responsibility. Also, work hours spent in the multi-level classroom are also related to time helping students. Therefore, the more hours the practitioners worked per week, the more time they believed they needed to meet students’ needs.

The teacher characteristics that were addressed as separate questions on the qualitative questionnaire were teaching experience, educational level, and classroom setting respectively. Teaching experience was not statistically significant for the number of years as it related to an increase in PD participation. However, most teachers, 57.03%, in this study were novice teachers who taught between zero to five years. Therefore, contingent on pre-ABLE service teaching, instructors may or may not have involved themselves in educational training to augment their knowledge to apply to their teaching expertise in ABLE/GED classrooms. To explore this phenomenon, the qualitative interview asked, “How does your teaching experience affect your professional development choice?” in order to assess the domain of “teacher experience.” Teachers did not conceptualize experience according to year of experience, but identified benefits of professional development in various ways. One teacher noted, “I think my teaching experience shows me where there are gaps in my knowledge and skills.” Additional
comments were, “I never felt like I learned too much, especially with teaching, it always changes, and there’s always a different way of looking at it” and “I think your teaching experience definitely affects your development. If I was teaching Science or Social, I still need to strengthen that area. It is still important to become updated with methodology.” Another respondent noted, “whatever I am trying to improve at or if there’s something I want to get good at” with respect to self-improvement as an instructor.

Thus, educators wanted to augment their knowledge and stay current with curriculum and instruction. Likewise, another interviewee responded, “I want to change with the times and be relevant.” Respondents also mentioned the benefit of their learning in relation to supporting the classroom and their students. For example, “I make my choices if the development is going to be beneficial to my students,” “I want to make sure I’m on top of it to provide the most accurate information,” and “I prefer professional development that applies to my classroom environment.” The themes that emerged from teachers were: “skills enhancement,” “benefit for student,” and “staying current” (with training topics, curriculum, and material).

The relationship between educational level and participation was not statistically significant. Half of the teachers in this study, 50.6%, identified having graduate degrees, the category with highest level of post-secondary attainment. However, their area of educational expertise and training was not specified. Many qualitative response for educational level were synonymous with responses that mirrored the teaching experience interview question with respect to the need to augment what was learned, as opposed to increasing the amount of time spent in training sessions. Interviewees wanted to stay
current with changes in their field and supplement their college educational training in order to help their students. The question regarding educational level stated, “How does your educational level affect your professional development choice?” Teachers noted, “I use what I didn’t learn in college or something I’m interested in. That drives my choices;” “I don’t have an educational background (in ABLE), I am self-taught;” and “I’d like to participate at the educational level as it relates to helping engage students we serve.” Another instructor stated, “My educational level also helps guides those decisions and what I need to take.” The initial primary themes for this question were “supplement education” and “helping students.” Many of the responses were parallel with respect to a desire to participate in professional development to help students. Because educators wanted to use their training to improve their skills, educate themselves about current curriculum and instruction trends, most specifically to help students, the final outcome themes for teacher characteristics included, “Improve Curriculum & Instruction Knowledge” and “Engage in Current Learning Trends.”

The previous responses were excerpts taken from all statements made in the interviews. In summation, the following themes were built from the interview responses for the qualitative data collection process. First, the two noticeable themes that were associated with teachers’ learning styles were “Learning Styles Identification” and “Teacher Self-Awareness.” Through identifying learning styles, teachers were also able to identify their own learning style and who they are as teachers and learners. Teachers in this study also believed knowledge of learning styles could help improve professional development program delivery and help them aid students in the classroom. Second, teachers in this study also examined preferred learning styles and professional
development activity type and attributed the improvement of PD development, structure, and program delivery to the benefit of using learning styles and learning styles assessment. Third, motivation for professional development participation was prompted by wanting to grow professionally and increase learning, but most significantly wanting to help students. Last, the benefit of acknowledging and accounting for teachers’ various characteristics and why they participate in PD are two-fold, enabling teachers to supplement their college education and teaching experience with current educational curriculum and instructional best practices. This is also valuable to instructional delivery in the classroom when helping students.
CHAPTER V

DISCUSSION

The purpose of this chapter is to present and discuss the research findings, specifically identifying implications for practice and research, and recommended future investigations. The purpose of this study was to examine the role of the ABLE educator as an adult learner in the reflective practitioner process as a participant in professional development and continuing professional education. This study also categorized the preferred learning styles of Adult Basic Literacy Education teachers, examined the motivation for participation in professional development and continuing professional education, learning styles as they related to choosing professional development activities, and the potential role, if any, teachers’ characteristics influenced activity choices. This investigation was governed and guided by the following research questions:

1. What are the preferred learning styles of ABLE teachers?

2. Is there a relationship between ABLE teachers’ preferred learning styles and the types of continuing professional education learning activities in which they participate?
3. What are the motivating factors that drive ABLE teachers to participate in continuing professional education?

4. Is there a relationship between ABLE teachers’ characteristics and their participation in continuing professional education?

Summary of the Study

This study revealed that ABLE/ABEL teachers were aware of their various learning styles and were primarily motivated to help their students without the additional incentive of receiving a stipend or being coerced to attend professional development and or continuing education training. Instructors in this study also realized the benefit of knowing learning styles when selecting professional development programs. Professional development and continuing education are monitored for instructors depending on the type of ABLE program in which they work. Finally, the primary motivation for certain professional development activity choices was navigated by teachers’ desires to help their students academically. Teachers also wanted to learn new instructional methods and increase their knowledge, though time was a significant factor when negotiating choices. Based on this study, there are areas for further research that may be explored and investigated in an effort to improve the professional development and continuing education system for ABLE/ABEL teachers who make an impact on their programs, classrooms, and thus, students.

Discussion of the Significant Findings

Findings Related to Research Question #1

The results related to question one found that the majority of instructors, 91.03%, found professional development beneficial to their growth in knowledge. Most
instructors were also knowledgeable about learning styles, though not as many educators used learning styles when selecting professional development activities. Teachers identified their learning style according to four classifications, prescribed by the Kolb’s Learning Style Inventory. There were four learning styles outcomes that were represented in this study as a result of facilitating the Learning Styles Inventory. They were Accommodating, Assimilating, Converging, and Diverging. Accommodating learners use their experiences to learn, enjoy experimenting, trying out what they learn, and act based on feelings. Assimilators are analytical, observant, and prefer lectures. Convergers are practical problem-solvers, who want to arrive at a specific solution to address student needs. Divergers observe different perspectives from various angles and can be understood as information magnets.

Thirty-five percent of participants ascribed to the Assimilating learning style, whose approach involved critical-analytic thinking, watching, and listening. However, Accommodators, who comprised the highest mean score among all groups, used their experience to learn, contingent on their emotional state. Accommodators are also known as the “hands-on” learners.

The qualitative survey provided additional insight with respect to teachers’ perspectives. The qualitative survey allowed participants to think more in depth, identify learning styles, and also, further describe their perspectives and perceptions about the relationship between learning styles and professional development. Teachers were also provided the opportunity to give more detail regarding their experience with learning style measures, which also afforded them the aptitude to define their preferred learning
style, whether conceptualized by Gardener’s Multiple Intelligences or Kolb’s *Learning Styles’ Inventory* outcomes.

**Findings Related to Research Question #2**

The results related to question two found that when choosing professional development activities, only 15.6% of instructors thought about learning styles, compared to 50.6% of instructors who stated they thought about learning styles “somewhat”, and 33.8% who did not think about learning styles. Teachers “significantly” used learning styles less than the percentage of those who thought about them, as indicated by 10.3% of responses. More participants, as denoted by 53.8% of responses, “somewhat” used learning styles, compared to 35.9% who did not use learning styles at all. These responses were captured on the quantitative survey.

The types of professional development activities in which teachers participated were also indicated. These included workshops provided by the ABLE program, workshops not provided by the ABLE program, college courses (degree-seeking), college courses that are not degree seeking, online classes, Alternative Delivery Options provided by the Resource Center Network, conferences, and online/social networking. Learning styles’ relationships to professional development were also examined, whereas, Accommodators had the highest mean score for all learning style groups. Workshops both provided and not provided by the ABLE program had a positive relationship with all learning style groups. In addition, workshops provided by the ABLE program was the most frequently attended and statistically significant. However, Alternative Delivery Options provided by the Resource Center Networks, was the least statistically significant, but regarded as most enjoyable by 53.6% of the responses.
Findings Related to Research Question #3

The results related to question three found that there were various factors which motivated instructors to participate in professional development. Most participants were extremely motivated to help students. This is denoted by 56.3% of the responses. The participating teachers also wanted to learn new instructional techniques (48.8%) and strengthen their knowledge (47.5%) which would also help their students. Only 36.3% of the teachers were motivated by their employers’ encouragement, and were least motivated by receiving a stipend. Over seventy percent (70.9%) of teachers would continue to participate in PD without receiving a stipend and would continue participating if there were not forced or “obligated” (79.5%). In addition, the quantitative analysis found that time, as indicated by “work hours”, had a strong relationship to PD participation. Most participants in this study worked less than thirty hours. However, time was also regarded as a potential barrier in qualitative responses.

Findings Related to Research Question #4

The results related to question four found that most participants were female, as indicated by 83.3% of teacher participants. Teachers who earned a graduate degree also constituted most of the research participants, as represented by 50.6% of the responses, compared to 27.8% of teachers who only earned a Bachelor’s Degree and an educational license. Most teachers in this study were the least experienced in teaching Adult Basic Literacy Education. These instructors, 57.03% of responses, only taught 0-5 years. This is in stark contrast to the most experienced instructors who have taught between 16-20 years (3.8%) or 20 years or more (7.6%). Instructors who believed professional development was most helpful were indicated by 91.03% of responses, and most
instructors, 56.3% were extremely motivated to help their students. The findings from the Regression analysis also indicated that teachers with more work hours were more likely to spend more time participating in professional development.

This finding was found to be interconnected to the findings illustrated in Tables 4 and 5 in which the ABLE teachers primarily participated in continuing professional development for the purpose of helping students and learning new techniques for their own professional practice. While some teachers in the open-ended question suggested that increased teaching hours served as a barrier to their participation in professional development, the quantitative data suggest the opposite to be true. The researcher is left to conclude that the more hours that an ABLE teacher teaches per week will in turn increase their level of vested interest to the profession of adult literacy. Therefore, the more vested a teacher believes that they are to the field, the more likely they will engage in continuing professional development.

Implications

This study has various implications which impact further understanding of ABLE/ABEL teachers as learners, Continuing Professional Education and Professional Development program structure and development, and improving professional practice in the ABLE/ABEL classroom that focuses on helping students. Few studies in Adult Basic Education were available to guide this topic for this research. Therefore, studies from K-12 education (Messemer, 2006), adult education theory, and other professional training disciplines were helpful to guide this research. Existing research informs the notion that teachers’ learning in professional development can be augmented by focusing on providing appropriate content knowledge, engaging individuals in participatory learning,
structuring the activity type, facilitating group learning, and appropriating adequate time for training (Garet, et. al, 2001; Birman, Desimone, Porter, & Garet, 2000).

Boulton-Lewis, Wilss, & Mutch (1996) cites Biggs (1992) asserting that adult learners should “have good knowledge of learning processes, of what motivates them, how they learn best” (p. 93). Wlodkowski (2008) emphasizes that motivation is an outcome of learning, and that both motivation and learning are mediated by an individual’s thoughts, emotions, and the social framework in which the learning activity takes place. This study attempted to explore some of those paradigms, particularly with capturing data on teachers as learners and professionals, their approaches to learning, and identifying motivating factors for participating in learning activities.

**Implications for Research**

The findings of this study may also add to, align with, or challenge existing empirical evidence or theoretical knowledge within adult basic education, adult education, and adult learning. One theoretical perspective posits that understanding learning styles provides tools for teachers to identify themselves and their students in the teaching-learning transaction (Brookfield, 1995). Knowing learning styles also helps instructors organize classrooms to meet student needs (Dunn, Beaudry, & Klavas, 2002). Participants from this research expressed the belief that assessing learning styles involves better understanding the learner. In addition, this study primarily enabled teachers to give an excerpt of their autobiographies as teachers and learners which provided information about ABLE/ABEL instructors’ approaches to teaching (Brookfield, 1995). Qualitative responses provided from the semi-structured interview feedback supported the notion that knowledge of learning styles helps teachers make connections to the
classroom. However, with greater, more in-depth opportunities to apply qualitative methods, more professional support may be given to current novice and in-coming teachers to the field, as a result of what was learned from teachers’ input.

Some literature also posits that utilizing preferred learning styles solely could impede development, but expanding the array of learning styles to which learners can become familiar, may provide a constructive educational experience (Brookfield, 1995). Participants in this research identified learning styles and did not primarily think about or rely on learning styles to determine choices. However, they did acknowledge the advantages of and practicality of connecting learning styles to professional development.

There is additional literature that suggests that efficient professional development that truly benefits the teacher in a learning organization, should be created based on the interest and abilities of the participant for whom it is designed (Brown, 1995). Using authentic assessments to help support teachers’ learning (Darling-Hammond & Snyder, 2000) in professional development may also aid in improving professional practice.

Some teachers in this research affirmed on the semi-structured interview that assessments not only could provide the self-evaluations necessary to assess learning needs for trainees, but also gives the workshop facilitator an opportunity to know their audience, so that the training session can be properly constructed to meet participant needs.

Training opportunities should be continual and be viewed as a “meaningful vehicle for supporting professional and personal growth and awareness” (Brown, 1995, p.99). Teachers in this study participated in workshops primarily provided by their ABLE program and Resource Center Networks, but most often enjoyed other activities such as conferences and non-ABLE sponsored workshops. Teachers also desired
improvement in method of delivery for professional development. Current workshops provided by the program do not always consistently and systematically involve learners in demonstrating multiple learning methods. Many workshops are structured in a staff meeting format. However, offering more enhanced types of activities and opportunities (Scribner, 1999) for learning delivered by ABLE programs more frequently can enable instructors to use multiple-modalities and also create an authentic learning experience for the teacher. In addition, teachers may have various chances to participate at the program level.

Various ABLE/ABEL programs and states use multiple methods and incentives to foster participation in professional development training (Tolbert, 2001). In addition, learning has also been regarded as on-going, situational, contextual, and specific to the learner and their motivations (Heimlich, Elaine, & Horr, 2010). Teachers’ primary foci in this research were to address the needs of their students, in addition to increasing their knowledge and learning new techniques from professional development, irrespective of external motivating factors such as their respective employers or administrators, receiving stipends, or being coerced.

Many studies conducted in adult basic education likewise focus on students, particularly with regard for addressing low literacy skills across multiple subjects. Although teachers are a critical element to students’ successes, there is a widening chasm between policy-makers’ expectations and practitioners’ experiences (Dennis, 2010), which could impact teacher retention. Therefore, programs should also monitor for causes for teacher attrition, considering rising rates of teacher turnover, evident in ABE
as it is in K-12 (Smith & Hofer, 2003; Smith & Gillespie, 2007), which impacts how long
a teacher stay in the field.

Previously conducted research with ABLE/ABEL teachers reported that close to
fifty percent of those surveyed taught less than five years, and only 28\% taught 10 years
or less (Smith & Hofer, 2003). This study found that over fifty percent of teachers were
novice teachers, who taught less than five years, and a combined amount of almost sixty
percent who taught ten years or less. This underlies the issues of program sustainability,
teacher retention, and less articulated concerns about teacher attrition. DeAngelis, Wall,
and Che (2013) also found a relationship between teachers’ perception of their
preparation related to their leaving the field of teaching. The authors also discovered that
when teachers were mentored, particularly upon induction, they could be make more
informed choices related to their career. These findings indicate the need to support
teachers early in their careers with mentors and training aligned with their needs and
interests to kindle and scaffold teachers’ tenure in the field. Thus, the importance of
mentoring is also evident.

**Implications for Practice**

The outcomes from this study may also inform the future practices of adult
literacy teachers, tutors, administrators and professional developers. There is literature
that advises that strategies learned in PD may be translated into classroom practice
(Palucci, 2010). Likewise, adult education programs, ideally, should be designed to align
with the needs of the participants as determined by the participants not solely the
supervisor, administrator (Birkenholz, 1999), or professional developer. In order to
properly accomplish this feat, teacher input is essential to advise program construction, presentation, and evaluation.

The results from the quantitative findings suggest, teachers in this study were aware of types of learning styles, defined learning styles, and found professional development beneficial to them as educators. Qualitative interview outcomes provided more information from instructors regarding learning styles, how learning style instruments could be informative, and experiences with previously used instruments. Instructors advised that “assessments” would be helpful to understand them as participants to improve how training could be structured. This is beneficial for trainers, so that trainees’ standardized inventories could be supplemented with qualitative feedback, notating teachers’ input, and provide a means for expression about how to best structure future training sessions.

Teachers also experience greater gains from their learning experience when they are more intimately involved in informing the learning process. This involves teachers in a learning environment that is engaging and critically reflective (Brookfield, 2006). Most teachers who participated in this research believed PD augmented their knowledge as adult learners and wanted to attend training specifically to help students. Therefore, enhancing the quality of instructor engagement would allow teachers to not only obtain new methods or information, but also allow them to critically reflect on ways by which they could target specific techniques and curriculum that could address students’ needs while using their time more efficiently.

In addition, because workshops provided by the ABLE program had the most statistically positive relationship to all learning styles and was the most frequently
attended form of PD, program-based training developers could align learning styles of their participants, particularly using online assessments, such as the *Learning Styles Inventory*, with workshop topics and objectives. This would enable trainers to get acquainted with their learners in advance, using the outcome analysis and garner more teacher input. It may provide a greater connection between the mode of learning, the objectives of the training, and later, student progress, which is tied to program goals that want to demonstrate effectiveness.

Resource Center Networks are no longer in operation, but “Alternative Delivery Options” are available to attend in-person or virtually. Thus, ABLE programs may work more collaboratively with the state ABLE professional development network to facilitate additional trainings which may embrace all learning styles. In addition, though “Alternative Delivery Options” were not statistically significant, but non-degree seeking college courses were, courses offerings provided by the ABLE program could mimic the college courses format, allowing teachers the freedom to chooses PD based on need, interest, and flexibility of schedule, because time is important, but may be limited for part-time employees.

Most teachers in this study, as other ABLE/ABEL teachers, are part-time employees who work less than thirty hours (Tolbert, 2001; Smith & Gillespie 2007). Time is and was an important consideration when balancing responsibilities within the ABLE/ABEL program or with other occupational commitments. Teachers wanted to engage in training, specifically to help students, but endured time constraints because of teaching at multiple sites, limited planning time, lack of release time from certain ABLE programs, and managing multiple jobs outside of the ABLE program. Thus, the impact
on program administrators is critical considering teacher attrition, and the need to establish and maintain a stable teaching staff and sustainable programs.

The greatest numbers of participants involved in this study were also novice teachers who have taught up to five years. Most teachers in this study also earned graduate degrees, but a smaller percentage earned a Bachelor’s Degree with licensed specializations. Teachers were not queried regarding teaching experience in other disciplines, specific educational levels (K-12), or subject area expertise, but this is relevant to explore. This may also impact how teachers view themselves as ABLE practitioners, whether regarded as tutor or professional, as it relates to the perception of competency with certain subject areas, the sense of urgency for professional development, the types of activities in which instructors participate, and the level at which teachers choose to supplement formal education previously attained. This is relevant to the best uses of teachers’ time investments.

Time may be conceptualized and interpreted as having various meanings and purposes. Time may be perceived as a spectrum in which activities such as work hours or professional development occur. The quantitative outcomes of this study suggest a positive relationship between time, as expressed as “work hours”, and PD participation. This may imply that an increase in work hours relate to an increase in PD participation. Considering teachers were extremely motivated to help students with whom they shared a significant portion of their schedule, these connections can be made. Teachers wanted to improve because it ultimately influences the instruction and relationship they share with students.
However, the findings from the interview expressed time expressed as a potential barrier to participation, though teachers still identified their desire to engage in PD. In this respect, time may be viewed as an important type of currency, a valuable resource that teachers have and must acknowledge and exchange when making professional development choices balanced against what is used for teaching responsibilities. Instructors still expressed the desire to continue participation, wanted to learn new techniques, wanted and strengthen their prior knowledge in an effort to help students, despite receiving a stipend, employer encouragement, or experiencing a sense of obligation. Thus, despite schedules and impending conflicts and commitments, time spent in PD ultimately, was valued as beneficial, related to supplementing knowledge gaps, complementing baccalaureate training, and fulfilling teachers’ desires to participate, because instructors’ focus on students were the focal point from which their choices were made. This would eventually help both students and teachers, particularly those who have not taught a long time in ABLE.

When teachers have opportunities to bond more intimately with themselves and others, intellectual and transformative growth may be fostered (Sinnott, 2005). Upon improved teacher self-efficacy and thus identity, an increased awareness and use of learning styles may proceed. As modes of learning improve, teachers become more cognizant of strengths and weaknesses in learning. They also increase their ability to become more resourceful when accessing resources to help not only themselves but their students because of improved self-efficacy. This also provides teachers an opportunity to become better models for adult learning for their students. Therefore, the teacher is able
to connect their instructional practice to the class environment employing principles learned in professional development (Daley, 2000).

As teachers invest in themselves, they make gains which they will invest into their students, their primary motivator. In addition to assessing the background, learning needs, and activity interests of trainees, balancing time accommodations are also prominent considerations for both the trainee who attends and trainers who construct programs. The adult basic education program and students, therefore, are the beneficiaries of any learning gains acquired.

Recommendations

Given the outcomes of this research, there are further recommendations that may support or enhance prior research in the field of Adult Basic Education and Literacy. This may contribute to helping teachers as learners and professionals. In addition, professional development trainers who provide learning opportunities for ABLE/ABEL teachers may also benefit.

Learning Styles

Learning style awareness and incorporation into the professional development curriculum and training session may help professional developers properly structure training so that it is best suited for the participant. Therefore, train PD developers and PD participants with proper application of learning styles with PD. Integrating multiple intelligences and learning styles has the potential for creating a well-balanced learning environment involving effective assessment, comprehensive curriculum, and producing reflective learners (Silver, Strong, & Perini, 2000). This is beneficial for the instructor as a learner and as a model for adult learning for their students.
Participants who responded to the qualitative interview advised that assessments should be conducted prior to facilitating workshops to know the learners involved in training. Therefore, both learning styles and preferred educational activities should be assessed to efficiently connect how one learns to the desired activity to the type of training that may be best suitable for participants’ interests and abilities. In addition, teachers should be given assistance with how to distinguish and how to utilize their learning styles more effectively to help enhance their learning overall. Experiences should be notated by journaling or monitoring progress during the training session and on teachers’ Individual Professional Development Profile, which teachers may also use solely and with their supervisors to create and re-evaluate professional goals. Teachers may also engage in another facet of transformative learning, via narrative learning that creates meaningful experiences (Clark & Rossiter, 2008). This involves teachers in the process of reflection and self-evaluation, where teachers may analyze themselves as teachers and as learners (Brookfield, 1995). Teachers should be encouraged to produce and share examples of effective lessons with artifacts that demonstrated what they learned from certain training sessions that engaged teacher and student learning styles. In addition, evidence is available for administrators, demonstrating that instructors are involved in their professional self-assessment and improvements in practice (Rayford, 2010).

**Learning Styles and PD Activity Type**

Most teachers in this study frequently participated in workshops provided by their ABLE program and Resource Center Networks though there are many settings in which adult learning take place (Hansman, 2001), where specific curriculum, social
relationships, and dynamics transpire. Provide a standardized process for instructors to provide input to their programs, particularly at the time in which teaches are engaging in PD. It is critical to examine and ensure these learning contexts fully benefit the learners as the programs and learners evolve. Therefore, follow-up with instructors to discuss, assess, and re-evaluate the impact and effectiveness of their learning activities, to help teachers avoid engaging in routine activities, done without opportunities to assess and identify effectiveness.

Considering individuals’ time constraints and given the pervasive nature and influence social networking has on the global society, incorporate other forms of learning via social networking media which may be supported by the ABLE program where teachers frequent for training. For ABLE teachers as learners specifically, online communities may be formulated (Terantino, 2012) engaging various learning styles. Knowledge transfer may be facilitated (Corbeil & Corbeil, 2012) and non-formal professional learning may also have a platform for participants in these digitally based constructs.

When providing program-based professional development that engages various learning styles, scaffold a holistic approach that supports teachers by connecting their learning modalities to their activity choices. In order to institute this process, the following is advised. First, facilitate a learning styles inventory for educators. Then, align each learning style with activities that involve a brief lecture-style introduction providing the relevance of evidence-based research as a guide and resource. Next, involve participants in hands-on activities with example lessons that could be used in the classroom that also use learning styles, present simulated classroom scenarios that use
training objectives for analysis and discussion, provide opportunities for instructors to share experiences in groups, so learners may use learning styles and benefit from other group participants. Last, allow post-session feedback as an assessment for summative evaluations that may be used to shape future workshops.

**Motivation and Professional Development Participation**

Teachers were most motivated by helping students in this study. Teachers also wanted to learn new instructional methods and increase their knowledge. Time was also a major factor that instructors had to acknowledge and account for when making professional development choices.

Various types of professional development activities exist, particularly at the program level, though program-based workshops take precedence. This is evident for teachers in programs that receive the ABLE Instructional grant. However, a dilemma remains for some programs that do not receive the ABLE Instructional grant, are not connected to this particular professional development system, and may not be aware of various diverse learning opportunities.

Promote professional learning opportunities for various programs and their respective teachers and tutors, irrespective of funding source and governance, to help encourage and stimulate participation in professional development. To aid this process, partnerships can be fostered between programs that do receive and do not receive the ABLE Instructional Grant. This encourages educators’ collaborations working within the ABLE/ABEL field which may also improve programming to further meet student needs.

Finally, encourage and allow teachers to participate in action research in the classroom or classroom research, because their PD participation is motivated by helping
students. This involves teachers more intimately with the professional change they may pursue, uses their time more efficiently, and connects theory and practice. Research also enables teachers to engage in the process of reflection to connect current methods with their future development (Roberts, Crawford, & Hickman, 2010).

**Teacher Characteristics**

Examining the various facets of ABLE instructors as individuals, learners, and teaching professionals offered valuable information to inform this study and potentially those in the future. Most teachers in this study were and are part-time instructors, earned graduate degrees, taught at multiple class sites with varying resources, but still made their students’ successes a priority, particularly when choosing professional development activities. The greatest number of participants in the study worked at class sites located within neighborhood communities (“community centers”), which may or may not isolate some instructors from other teachers in their program.

Instructors in this study also wanted to work with other colleagues in their program and in the ABLE/ABEL field. So, provide an avenue for teachers to work collectively with other teachers in their program and in the ABLE/ABEL field to support the processes of learning, growing, and sharing professionally. Teachers that work collectively with fellow colleagues in professional development can discuss common dilemmas, viable solutions, and leadership roles to institute new practices (Birman, Desimone, Porter, & Garet, 2000). Also, providing teachers with professional development and learning opportunities that are consistent over time facilitate new methodologies being acquired, strengthens current practices (Sun, Frank, Penuel, & Kim, 2013), and connects PD content to the classroom. Provide teachers with several options,
as exemplified in the Alternative Delivery Options but, establish the practical relevance for the teacher at the program level for the classroom, because teachers’ impetuses is to help their students.

There are several opportunities to assess teachers’ perceived effectiveness of professional development as it translates into practice in the classroom. Cautious measures should be taken when endorsing and utilizing certain “evidenced-based practices” as the foremost preeminent methods that should be the paradigm for all classes (St. Clair & Belzer, 2010). On the contrary, certain educational programs may be suitable. If, a research-based measure is employed in program-based workshop, describe and exemplify the potential benefits of these practices. Scaffold teachers by allowing them to use examples of these practices, so that they have an opportunity to experience each step. Involve administrators, supervisors, or mentor teachers in observing and evaluating effectiveness in the workshop, then classroom. Use quantitative and qualitative surveys to inquire how the materials and information were most useful to teachers. Last, involve teachers’ input by capturing the results statistically to report findings and to forecast teachers’ future activities of interest.

**Areas for Further Study**

There are areas for further exploration, research, and study, which may add to the literature and body of knowledge for both Adult Basic Literacy Education, specifically, and education, in general. There are opportunities to further support teachers as learners. The system of professional development for teachers may also expand and enhance how teachers as learners are serviced. It is essential to further empirically examine the scope of learning styles and the relationship it has to the learner, their
training, and overall professional development. In addition, more research-based information is needed to identify and define specific teacher needs with respect to accessing and employing curriculum resources, improving teachers’ knowledge and instructional skills, and providing appropriate technological tools to teachers to equip students for skills enhancement, the 2014 GED test, post-secondary education, and the workplace.

Learning Styles & Learning Styles Related to PD Activity Type

Teachers have expertise with regard to informing and shaping how professional development is provided and the curriculum contents of professional development workshops. Instructors that teach within programs, especially those that receive the ABLE Instructional Grant, have an opportunity to create professional development specific to their individual and professional needs and interests. Important areas for further exploration are the potential interrelationships of learning styles, professional development, and their impact on teaching style, if any. Because professional learning occurs for occupational purposes, examine which learning style tools best provides teachers with an understanding of who they are as learners, so that learning styles may be used more appropriately to improve choices and learning experiences. In this study Accommodators represented the dominant learning style. Another study may expose a different learning style or combination of styles as most prominent, particularly contingent on the learning styles’ instrument used. Furthermore, while the purpose of this study was to measure teachers’ learning styles and the correlation to participation in continuing professional education, the findings of this research may inform future studies that examine the impact of teacher learning styles on their modes of teaching in the
classroom. In addition, because teachers in this study were primarily motivated to help students, it would be beneficial to the adult literacy field to assess how teachers’ learning styles and modes of teaching impact students’ academic progress and achievement.

**Motivation and PD Participation**

Teachers in this research have focused and continue to concentrate their energies on students. Their learning activity choices are a reflection of how to best serve their students. Thus, engaging teachers in the creative process of structuring and experiencing meaningful lifelong learning activities gives them the opportunity to model these similar experiences with and for their students, so their classes and professional development are not and will not become “information dump” (2/10/2013) sessions. Because time is a primary factor when making training choices, explore teachers’ perspectives on increased participation and their perceptions on the benefit over time. Also, evaluate student data such as test scores or work samples to determine the instructional impact on student achievement outcomes.

Another area for further exploration is demonstrating the impact that teacher-administrator partnerships have for motivating and supporting PD participation and professional learning. Both parties are partners in adult learning and possess a role in Professional Development Continuing Professional Education program enhancement as well as the success of their ABLE program. This partnership is also a democratic process, where each stakeholder has a vested input in program construction and future development. Teachers, more specifically can express current events and occurrences they experience daily and discuss how to better address those issues via Professional Development Continuing Professional Education. They also may express how to modify
Professional Development Continuing Professional Education to meet their needs with the support of the administrator. Administrators may also serve as “professional development leaders” (Drago-Severson, 2007), where teachers’ meaningful learning contexts may be monitored, to determine the degree of teachers’ learning and development.

In addition, involving the administrator in a standardized system of observation and feedback allows them to provide a system for teacher accountability and evidence from which a teacher may learn and modify curriculum and instruction. The teacher-administrator relationship also provides a medium for dialogue and communicative exchange, allowing an information share. Pratt (1998) urges that teacher evaluations should be “equitable and rigorous” (p.257), involving the evaluator, the subject of evaluation, and what is being evaluated.

Due to the nature of judgment, duty, and anxiety involved, values and expectation must be stated prior to service in an effort to engage teachers in an opportunity to experience objective feedback for professional growth. Furthermore, evaluation should be an extensive exploration beyond technical methodologies, giving consideration to those being taught, the setting, and the time period (p.260). Thus, teachers and administrators should work more closely to examine these parameters to create a more positive process to promote teachers’ professional growth. This involves a more democratic process, where teachers are included from various program types and geographic locations, so that teachers from diverse geographic and programmatic areas may be represented and provide perspectives respectively. This also involves a process of “responsive listening” (Galbraith, 2003, p.8). In the same respect that an adult
education professor acts as a mentor to colleagues, the adult education-ABLE administrator may also mentor, engaging the teacher in a productive discourse where issues and concerns are addressed, nurturing may be facilitated, and “good teaching” may be promoted. Furthermore, during the evaluation, teachers and administrators may confer regarding the PD learning process, the professional outcomes for the instructor, and classroom impact.

**Teacher Characteristics & PD Participation**

Most teachers in this study were novice teachers who taught five years or less. To promote tenure in the field, institute a program-based mentoring mechanism. Teachers may also benefit from being mentors and engaging mentoring relationships because mentoring is fundamental to learning in the workplace (Hansman, 2002). Lieberman (2012) asserts that teachers as mentors have the potential to and have exhibited roles as leaders, resource brokers, social justice advocates, and Communities of Practice Collaborators (p.5). Rockoff (1998) found less attrition, improved student achievement, and betters skills among teachers that participated in mentoring programs. Employing mentoring relationships may also engage learning styles.

Examine the impact of training on teachers’ and their potential tenure in the ABLE/ABEL field. Also because most teachers in this study had graduate degrees, the issue is not lack of education, but honing the training content to focus on increasing knowledge, learning new teaching strategies, and helping students. Explore the extent that content area training for specific subjects positively impacts students, to determine the benefit for students’ learning gains.
The landscape in which ABLE teachers participate in PD has changed. The Resource Center Networks have dissolved (6/30/2013) providing the opportunity for the Professional Development Network to be instituted. The current platform in which the ABLE PD system primarily delivers professional development is virtual. This allows instructors to choose topics based on their interests and engage in alternative forms of professional development that is more learner-centered for the instructor.

Based on aforementioned recommendations for further research and study, the following is advisable for an on-site-program based professional development program. This program will enable ABLE/ABLEL instructor to work with their respective programs in cooperation with their state governance. First, supervisors should facilitate a learning style and training topic interest inventory for teachers. Next, teachers should meet individually with superiors to review results so, Individual Professional Development Profiles may be completed to project which learning styles will correlate with the appropriate activities, giving staff hands-on opportunities to make desired choices. Supervisors may also look at individual and group needs to create training days based on learning styles and expressed interests. When training is deployed on-site, create opportunities for collaborative work among participants in settings using cohorts with different learning styles. Evaluate feedback from both individual PD and PD group training sessions to notate opinions regarding usefulness of workshop. Share feedback at staff meetings. This acknowledges that staff voices are heard and are incorporated into program construction and development.

Next, encourage staff to facilitate action research and observe staff in the classroom to assess if a positive impact was made on teacher and student. Examine
teachers’ artifacts from classes and lessons, such as, lesson plan notes, teacher journals, and student work samples and products, to evaluate outcomes from teaching method. Survey teachers and students with questionnaires and interviews, to better understand perspectives about the impact of the lesson on student progress. This extensive approach enables staff and students to participate in a system that invests the best interest of all those involved. Last, encourage teachers to share successes with other colleagues at future training sessions both at the program level and at state conferences.

In addition, bridge the chasm between teachers, program administrators, and the PD system as a whole by establishing a teacher-lead advisory panel to advise curriculum and monitor the direction of the professional development programs that will eventually impact the ABLE program. This also gives ABLE teachers an opportunity to engage in more leadership roles within professional development systems which impact their ABLE classrooms and programs. “Research in ABE indicates that those teachers with greater access to decision-making within the program demonstrated more knowledge and action change” (Smith & Gillespie, 2007, p.28).

In the same manner that programs have and are often mandated to have advisory committees, the PD/CE system could also be further supported with a panel, as well. This committee, represented by teachers, administrators, and PD developer from all ABLE regions in the state could: advocate for professional development system enhancement, advise how various learning methodologies can enhance activity delivery, and investigate whether and to what extent programmatic objectives and tasks are being accomplished to benefit the teacher and thus, the student. This would enable ABLE instructors to have a more personal and professional investment in the professional
development construction process. Furthermore, within committee sessions, teachers will have an opportunity to engage in discourse, writing, and presenting best practices that will help themselves, their colleagues, their programs, the state system, and other non-ABLE Instructional grant funded programs as well.

The impact of the group may advise several aspects of the pre-existing professional development system from inside of the system, extending out to the other entities within the ABLE system as a whole. For example, the committee can share the student input they receive with regard to how students view their experience within the classroom and ABLE program, and discuss how students’ needs may be met, by the teacher, through professional development. Second, with an improved administrator-teacher relationship, the committee may also use administrator feedback as a means to advise professional development/continuing professional education program construction and evaluation. Third the committee may also work together with other local and national organization to promote and learn how to more effectively advocate for literacy in their respective communities. This information may also be brought back to their ABLE programs to be shared during staff meetings. The committee could also ensure that a standardized means of follow-up is instituted with instructors, to attempt to ensure that the professional development was meaningful, useful, and effective.

This model could also add to the existing cohort of research studies with a “strong research agenda” (Martin, 2003, p.7) that could influence policy and thus, support other state-initiated program initiatives that impact programs, teachers and ultimately, students, who are the center of teachers’ attention. This will also help to close the professional gap of influence between teachers, administrators, and professional developers. Current
teachers should be included at the “planning table” for Professional Development and Continuing Professional Education programming. The “voice of all stakeholders in adult literacy programs need to be heard,” (Askov, 2009, p. 250) when constructing, expanding, and improving professional development, continuing education, and professional learning opportunities.

**Limitations**

There were various constraints that posed limitations. One drawback was the low sample size which posed a problem with improving the statistical power of the quantitative analyses. Several attempts were made to garner additional participants. Unresponsive programs that could have contributed additional participants contributed the low sample size. There were other factors that reduced the numbers of participants available for use: teachers extracted from the data pool because there were participants who solely finished and submitted one and not both surveys; participants who skipped questions on the *ABLE Instructors as Adult Learners within Professional Development Survey* which affected the reliability and validity of questions and constructs; and lack of teacher participation from other states in the Midwest region. However, the sample did represent close to 10% of the ABLE teacher population in Ohio. In addition, collecting data via electronic media was efficient for analysis, but it also provided a barrier for some participants to give immediate feedback due to the time gap between questionnaire receipt and submission of surveys. Collecting data in-person may remedy this occurrence for future studies. Though if paper surveys are issued, data analysis may be more time consuming, and if digital versions are used, computers or computer labs must be available. Additional measures and precautions should also be taken to ensure the
environments where respondents complete surveys, are private, and confidentiality of responses are secured.

Both quantitative methodology and qualitative methodologies were used for this research, with questionnaires and interviews used to collect data. Utilizing a mixed methodology provided the benefit of gathering more in-depth information from participants, allowing elaboration and explanation in detail regarding their experience. There was also an attempt to use one method’s outcome to support the second. However, outcomes from both methods were not completely aligned. Future studies that focus on one using method at a time, with an adequate sample size, may improve the empirical integrity of the study and add more robust data from the sample to better reflect the population. In addition, using other forms of qualitative analysis such as observations and documentaries may provide more in-depth examination and discussion and allow viewers to make their own conclusions. This may also be used in addition to using audio recording to aid in executing data collection, management, and examination.

An additional limitation of this study involved the amount of hours a teacher spent in the classroom defined as work hours. This may have posed a conflict between time being conceptualized as positively influencing or creating a barrier to professional development participation. The significance of the findings in Table 6 indicated teachers who spent more time in class spent more time in professional development. One question left unanswered relates to the undefined category of part-time compared to full-time contact hours in adult literacy education. This is also important considering the potential impact on professional development. A segment of the participants in this study, who spent less than thirty hours in the classroom, also did not consider their time as “work”,
but volunteering. The lack of distinction between “work” and “volunteering” with respect to time, coupled with the open-ended response format on the questionnaire, may have complicated the results determining how time could be more clearly defined, and thus, properly reflecting how teachers perceived their engagement with students.

**Conclusion**

ABLE teachers play such a vital role in their ABLE programs. Therefore, supporting sustainable progress for teachers and thus students is imperative. There are continual changes in the professional development system and ABLE program structure, as well as increases in governance requirements for demonstrating progress. Accounting for various issues that arise from predictable and unpredictable classroom dynamics are important to consider.

Many teachers face the daily realm of uncertainty with lesson plans prepared for unattended classes, making it even more difficult to be inspired to teach, think about their learning and furthermore learn more advanced techniques to become better teachers. Therefore, the issues of unpredictability and lack of student accountability are occurrences outside of instructors’ control.

Examining teaching schedules with respect to classroom setting or site location is also essential. Many teachers also teach at more than one site and often have classes that are multi-level, where curriculum and instruction have to be negotiated and balanced. These issues, perhaps, have a subconscious impact on teachers as learners and their motivation to stay in their respective programs. Yet the need to maintain a professional, competent, and effective staff remains.
As adult learners who embody several facets of adult learning, it is important that teachers’ professional training involve and reflect the multidimensional and multi-layered realms of teaching, teacher identity, and learning. Providing teachers with an avenue to critically reflect gives the opportunity to use learning experiences in professional development to analyze teacher identity, determine how to use different learning media and mediums, and help teachers use past experiences to connect with future experiences on the learning continuum. Furthermore, engaging participant learning styles enables the learner to assess their specific areas of need, so that when activities are chosen, they are properly aligned according to the curriculum of interest and to the activity that best uses the learning style. Attempting to incorporate what is learned in the preparation session into the classroom will also give the PD participant an opportunity to examine the extent to which the training was beneficial.

Through the process of transformation, teachers not only improve as professionals and learners, but eventually influence the learning of their students. Teachers are most motivated by helping students and their own personal learning. Teachers have the potential to positively impact how and what students learn by providing experiential learning opportunities that they have found and know to be beneficial through research, reflection, and practice. By participating in Communities of Practice, whether traditional or virtual, teachers enhance their learning and model this type of learning forum that exists inside and outside the classroom for students. Professional Development, Continuing Education, and Professional Learning are vehicles for change. Teachers not only benefit from participating, but also from the support received from their administrators, other colleagues, and the field in general.
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## APPENDIX A

<table>
<thead>
<tr>
<th>Program Name</th>
<th>Location</th>
<th>#</th>
<th>CD</th>
<th>DD</th>
<th>RD</th>
<th>Notes/Contact Person</th>
</tr>
</thead>
<tbody>
<tr>
<td>State Community College-1</td>
<td></td>
<td>5/4/11</td>
<td></td>
<td></td>
<td></td>
<td>Called 5/4/11 spoke w/ “Trisha” Director will return call</td>
</tr>
<tr>
<td>Career Center 1</td>
<td></td>
<td>5/4/11</td>
<td></td>
<td></td>
<td></td>
<td>Called &amp; left a message for Mr. T; received a call back from J T; need to mail abstract and permission letter</td>
</tr>
<tr>
<td>Career Center-2</td>
<td></td>
<td>5/4/11</td>
<td></td>
<td></td>
<td></td>
<td>Mr. BXXX will e-mail information regarding study</td>
</tr>
<tr>
<td>County JVS-1</td>
<td></td>
<td>5/4/11</td>
<td></td>
<td></td>
<td></td>
<td>Spoke with JXX SXXX will e-mail information regarding study</td>
</tr>
<tr>
<td>Community Center-1</td>
<td></td>
<td>5/4/11</td>
<td></td>
<td></td>
<td></td>
<td>Spoke with J-XX M G-XXX will mail abstract &amp; Permission letter; survey to follow</td>
</tr>
<tr>
<td>School District-1</td>
<td></td>
<td>5/4/11</td>
<td></td>
<td></td>
<td></td>
<td>Need to call back-line was busy</td>
</tr>
<tr>
<td>School District -2</td>
<td></td>
<td>5/4/11</td>
<td></td>
<td></td>
<td></td>
<td>Need to e-mail principal for initial permission</td>
</tr>
<tr>
<td>(County) Career Center-3</td>
<td></td>
<td>5/4/11</td>
<td></td>
<td></td>
<td></td>
<td>Spoke to XX need to e-mail administrator/instructor regarding research</td>
</tr>
<tr>
<td>JVSD-2</td>
<td></td>
<td>5/4/11</td>
<td></td>
<td></td>
<td></td>
<td>Spoke to , left voice mail for coordinator; coordinator called back on 5/5/11; need to e-mail her the abstract 1st</td>
</tr>
<tr>
<td>Literacy Coalition/Community Center-2</td>
<td></td>
<td>5/4/11</td>
<td></td>
<td></td>
<td></td>
<td>Left voice mail for program coordinator</td>
</tr>
</tbody>
</table>

*Number of teachers in program is denoted by #

** CD, DD, and RD represent initial date of contact, questionnaire delivery and retrieval dates respectively
APPENDIX B

1. Please indicate the number of years you have taught in A.B.L.E.:
   a. 0-5
   b. 6-10
   c. 11-15
   d. 16-20
   e. 21 or more

2. Please state your gender:
   a. Male
   b. Female
   c. Other

3. What is the highest level of school you have completed or the highest degree you have received?
   a. Less than a high school degree
   b. High school degree or equivalent (e.g. G.E.D.)
   c. Some college but no degree
   d. Associate’s degree
   e. Bachelor’s degree
   f. Bachelor’s degree + education certification or license
   g. Graduate degree

4. Please state the setting type for the A.B.L.E program or programs in which you work:
   a. Community College
   b. Vocational School
   c. Public School District
   d. Career-Technical Education Center
   e. Educational Service Center
   f. Community Center
   g. Church
   h. Other (please specify): __________________________

5. Please indicate the total amount of hours for which you are paid each week including planning
   _____

6. Do you find professional development helpful to you as an instructor?
   a. Yes
   b. No
7. Do you believe professional development helps you become more knowledgeable as an adult learner?
   a. Yes
   b. No

8. How frequently do you participate in professional development?
   a. Twice per month
   b. Monthly
   c. Once each quarter (quarterly)
   d. Once every six months
   e. Once per year (annually)
   f. Other, please specify:

9. What types of professional development activities do you participate in most often?
   Please select ONE option that best represents how often you participate in that activity:

<table>
<thead>
<tr>
<th>Activity</th>
<th>Never</th>
<th>Rarely (Have done this 1-2 times)</th>
<th>Sometimes</th>
<th>Frequently (very often)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Online Courses</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Workshops provided by your AB LE Program</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Resource Center-sponsored workshops</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Workshops (Other)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>College Courses (Degree Seeking)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>College Courses (Non Degree Seeking)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Conferences</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>“Alternative Delivery Options”</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Online) Social Networking Web Sites</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
10. On a scale of 1-5, how much do you enjoy the following types of professional development activities?

<table>
<thead>
<tr>
<th>Activity</th>
<th>1= Not at all</th>
<th>2= Very little</th>
<th>3= Sometimes</th>
<th>4= Well (most times)</th>
<th>5= Extremely (a lot of enjoyment)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Online Classes/Courses</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Workshops provided by my ABLE Program</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Resource Center-sponsored workshops</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Workshops NOT provided by my ABLE Program</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>College Courses (Degree Seeking)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>College Courses (Non-Degree Seeking)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Conferences</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Resource Center Network sponsored workshops or “Alternative Delivery Options”</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Online/Social Networking Web Sites</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

11. What other types of professional development would you participate in, if given the time and opportunity? Please rank in numerical order, from 1-3, with number 1 being your first choice, number 2 your second choice, and number 3 your last choice:

___ Meeting with Colleagues in my program to share ideas
___ Observation and feedback by supervisor or colleague
___ Meeting with other practitioners in the field to share ideas
12. On a scale from 1-5, how much do the following factors play a role in motivating you to participate in professional development?

<table>
<thead>
<tr>
<th>Factor</th>
<th>1=Not at all</th>
<th>2=Very little</th>
<th>3=Sometimes</th>
<th>4=Most times</th>
<th>5=Extremely (all of the time)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Encouragement from my employer</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Receiving a stipend to participate</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Opportunity to increase and strengthen knowledge</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Opportunity to learn instructional technique</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Helping my students improve my skills</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

13. If you did not receive a stipend, would you continue to participate in professional development activities?
   a. Yes
   b. No
   c. Uncertain

14. If you were not obligated to attend, would you continue to participate in professional development activities?
   a. Yes
   b. No
   c. Uncertain

15. Do you know what your learning style is? If you know or think you know what your learning style is, please describe in the comment field below:

   a. Yes
   b. No
   c. Uncertain
   Comments________________________________________________________________________
   ______________________________________________________________________________
   ______________________________________________________________________________
   ____________________________________________________________

16. Do you think about your learning styles when choosing professional development activities?
   a. Significantly
   b. Somewhat
   c. Not at all

17. Do you use your learning styles to determine which professional development activity you will choose?
   a. Significantly
b. Somewhat
c. Not at all

18. In what ways do you think professional development accommodates your learning style?
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

19. In what ways do you think professional development ignores your learning style?
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

20. **How much do you think professional development influences your classroom instruction?**
   a. Not at all
   b. A little
   c. Somewhat (most times)
   d. Significantly (all of the time)

21. Please give an example of how your classroom instruction has changed as a result of having participated in professional development. If your classroom instruction has NOT changed as a result of professional development, please comment on why you think this is so:
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

22. Please list below, any comments or concerns you have regarding this questionnaire, research, or any other related issues:
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
APPENDIX C
ABLE Instructors’ Qualitative Questionnaire

How does or how would knowledge of learning styles help you as an ABLE-Adult Education professional?

Please describe what you have learned from the learning styles’ inventories or assessments you have taken in the past?

How would you describe your learning style(s)?

Given your learning styles, how might professional development be designed to best serve you?

What motivates you to participate in professional development?

What prevents you from participating in professional development?

How does your teaching experience affect your professional development choices?

How does your educational level affect your professional development choices?

How does your classroom setting affect your professional development choices?

How would you improve the current professional development system for ABLE educators?
How would these improvements affect your participation in professional development?

How would these improvements affect your experience in professional development?
## APPENDIX D

### IV-DV MATRIX

<table>
<thead>
<tr>
<th>Research Questions</th>
<th>Survey Questions</th>
<th>Independent Variable</th>
<th>Dependent Variable</th>
<th>Analysis</th>
</tr>
</thead>
<tbody>
<tr>
<td>What are the preferred learning styles of ABEL teachers?</td>
<td>(Determined from Kolb’s Learning Styles’ Inventory)</td>
<td>Preferred Learning Styles</td>
<td></td>
<td>Numbers/ Percentages Of Each LS</td>
</tr>
<tr>
<td>Is there a relationship between ABEL teachers’ preferred learning styles and the types of continuing professional education learning activities in which they participate?</td>
<td>9. What types of professional development activities do you participate in most often? 11. What other types of professional development would you participate in, if given the time and opportunity?</td>
<td>Preferred Learning Styles</td>
<td>PD Activity Type</td>
<td>ANOVA (Separate ANOVA for each activity)</td>
</tr>
<tr>
<td>What are the motivating factors that drive ABEL teachers to participate in continuing professional education?</td>
<td>13. On a scale from 1-5, how much do the following factors play a role in motivating you to participate in professional development? 14. If you did not receive a stipend, would you continue to participate in professional development? 15. If you were not obligated to attend would you continue to participate in PD?</td>
<td>Motivation</td>
<td>PD Participation</td>
<td>Descriptive Statistics and Pearson’s Correlation</td>
</tr>
<tr>
<td>Is there a relationship between ABEL teachers’ characteristics and their participation in continuing professional education?</td>
<td>2. Please indicate the number of years you have taught in A.B.L.E. 4. What is the highest level of school you have completed or the highest degree you have received? 6. Please indicate the total amount of hours for which you are paid each week including planning? 9. How frequently do you participate in professional development?</td>
<td>Teachers’ Characteristics* Learning Styles</td>
<td>PD Participation</td>
<td>Regression</td>
</tr>
</tbody>
</table>

*Years taught/teaching experience- Number of hours/week…paid  
Educational level-
May 09, 2011

Congratulations! Your research request regarding use of the Learning Styles Inventory (LSI) has been approved. Attached you will find two PDF files:

- MCB200C- This is a copy of the LSI test. You may print or copy this document as needed for your research.

- MCB200D- The profile sheet contains the answer key for the test as well as the profiling graphs for plotting scores. This document may also be reproduced as necessary for your research. The AC-CE score on the Learning Style Type Grid is obtained by subtracting the CE score from the AC score. Similarly, the AE-RO score = AE minus RO.

These files are for data collection only. This permission does not extend to including a copy of these files in your research paper. It should be sufficient to source it.

We wish you luck with your project and look forward to hearing about your results. Please email a copy of your completed research paper to (sales representative)@haygroup.com or mail it to the following address:

LSI Research Contracts

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