Becoming an Expert through the Process of Professionalization: A Case Study of an Adult Basic Education Licensure Program

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I dedicate this dissertation to…

...the 10 teachers in this research study who graciously shared their time with me and their experiences in the licensure program. Their insights about adult educators as a community of practitioners helped me grow as a teacher and teacher educator in a unique field.

...Peter Bajurny, my husband, and Ben and Betsy, our cats, for supporting my efforts through graduate school and encouraging me throughout the dissertation process.

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Abstract

This is a case study of ABE licensure program participants who completed or are actively completing the program as a part of the professionalization process. Program participants were either pre-service (less than one year teaching experience and/or actively looking for a teaching position) or in-service (more than one year teaching experience and already hired). They may also have taken on multiple professional roles before and after program participation, and may have taught a variety of content in a variety of settings. Given this diversity of experience and work settings, research questions addressed what ABE teacher expertise looks like, how it develops through specific licensure program components, and ways in which it can continue to develop after program completion. Findings indicated that experience and time of entry into the program factored into the degree to which participants benefited from specific program components. Implications for program administrators and professional development providers outline how to remain engaged with the field, connect with K-12 practitioners, and prepare teachers on academic and practical levels.

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Chapter 1: How Expertise Develops through Professionalization in ABE

Introduction

In 2014, the New York City Community of Adult Math Instructors (CAMI) from high school equivalency and college transition courses convened for a professional development opportunity. At the meeting it became apparent that many practicing teachers lacked adequate preparation. The teachers "[came] with varied mathematical content knowledge and teaching experience" (Appleton, Farina, Holzer, Kotelawala, & Trushkowsky, 2017, p. 34). Mathematics was not the only content area. This lack of formal instruction in content areas, especially English as a second language (ESL), was prevalent in Minnesota. In 2010, Johnson, Marchwick, and Liden (2010) conducted a survey of adult basic education (ABE) practitioner professional development needs and found that only 22% of the 60% percent of respondents teaching ESL in the past five years were actively seeking graduate education in teaching ESL, revealing that many ESL teachers lack content knowledge in second language acquisition and training in the instruction of ESL. These gaps in knowledge require alternative routes of development, but the impetus for this need resides in preparation of teachers.

The journey to becoming an adult basic education (ABE) practitioner is as unique to each individual as are the programs and services offered from state to state. An accidental profession, most practitioners do not intend to teach what they inevitably teach as an ABE practitioner (Appleton, Farina, Holzer, Kotelawala, & Trushkowsky, 2017). This lack of formal training in the areas they teach is indicative of a need for additional

training opportunities to gain the knowledge and skills needed for effective instruction. Differences in formal training, content knowledge, and experience in the field may act as a call to facilitate spaces where teachers can learn in the way they want their students to learn (Appleton et al., 2017). These learning spaces are part and parcel of becoming a professional in the field of ABE.

Research Question

This study is a case study of ABE licensure program participants who completed or are actively completing the program as a part of the professionalization process. This program was available for prospective and current teachers to either obtain an initial license, or support an existing K-12 license through an endorsement. Program participants were either pre-service (less than one year teaching experience and/or actively looking for a teaching position) or in-service (more than one year teaching experience and already hired). They may also have taken on multiple professional roles before and after program participation, and they may have taught a variety of content in a variety of settings. Given this diversity of experience and work settings, my research questions address what ABE teacher expertise looks like, how it develops through specific licensure program components, and ways in which it can continue to develop after program completion.

The primary research question is as follows:

How are the individual and situational facets of expertise and their implications for teacher education conveyed (or acquired) through the program coursework?

And the following four main research questions guide the study to address both individual and situational facets of expertise for pre-service and in-service teachers:

- What kind of expertise do inexperienced program participants gain from courses in the licensure program?
- What kind of expertise do experienced program participants gain from courses in the licensure program?
- What program components contribute to the development of expertise in ABE program participants (e.g., online discussions, site visits, microteaching presentations, lesson plans)?
- How do program components contribute to the development of expertise in a variety of teaching settings?

Continuing education and training was not the focus of this study; however, it is an important part of the professionalization process that participants spoke to in the interviews and will be addressed in the recommendations for practitioners section of this thesis.

Literature Synthesis

The sociological literature has presented various definitions of the concept of a profession (Evetts, 2003). However, a common definition is an occupation in which there is “mastery of a well-defined set of knowledge and skills acquired through a rigorous and structured course of study” (Gilkey, Garcia, & Rush, 2011, p.179), a

definition echoed by Shanahan, Meehan, and Mogge (1994). Freidson (1970) extended this contention in the foundational study “The Profession of Medicine,’ in which he argued that the concept of profession differs too greatly across fields and, given that complexity, it should be viewed as a process, which he termed ‘professionalization.’ Professionalization can be defined as “being responsible for meeting the demands of a market, the undertaking of higher education qualifications and engaging in essential specialist training in order to equip practitioners with advanced knowledge of their chosen field of practice” (Leigh, 2014, p. 627). In other words, professionalization is the means by which the standards of a profession are communicated, understood, and implemented (Cameron, 1981; Cervero, 1992; Perin, 1999; Shanahan, Meehan, & Mogge, 1994) and takes shape in implementation of certification or licensing, implementation of standards and professional development activities.

ABE practitioners may participate in three professionalization activities: (a) credentialing (i.e., certification or licensing), (b) standards implementation (i.e., standards of effective practice for teachers as well as content standards), and (c) professional development (i.e., initial and ongoing). This study centers on the credentialing process; however, the latter two components factor into the development of expertise in different ways for ABE licensure program participants dependent, in part, on when they participated in the credentialing program at the heart of this study.

Professional growth occurs at various points throughout an ABE practitioner’s career and can be viewed as a process rather than a construct (Freidson, 1970, 1986). These activities, however, manifest differently from state to state (Belzer & Darkenwald-

DeCola, 2014). This is due to state or local control over policies regarding the provision of adult education services, professional preparation of instructional staff, and initial and ongoing professional development of practitioners. In a national scan of these policies, Belzer and Darkenwald-DeCola (2014) found that the differences in these activities across states is so extensive that "state directors do not always know what policies exist in other states and may lack a sense of the bigger picture of professional requirements for instructors nationally" (p. 4). This suggests that while resources may be available for professional growth and development of expertise, making information available and accessible nationwide remains a pervasive issue in the process of professionalization.

Certification or licensing.

The availability of a rigorous and structured coursework related to teaching adults is part and parcel of the process of professionalization because "whereas the majority of adult basic education teachers are qualified to, and have taught in K-12, they have scant formal education related to teaching adults" (Smith & Gillespie, 2007, p. 210). Coursework in adult learning theory could supplement the content knowledge of these former K-12 teachers with expertise in strategies for teaching adult learners.

The course of study often results in a credential and membership to various professional associations that serve to "distinguish [professionals] from amateurs or laypeople, and they are afforded greater autonomy, status, and often salary, based on this distinction" (Gilkey, Garcia, & Rush, 2011, p. 179). Examples of a credential include licenses and certificates. The concept of certification is defined as "the process by which

a professional organization or an independent external agency recognizes the competence of individual practitioners" (Galbraith & Gilley, 1985, p. 12). Certification may simultaneously provide more job security and opportunities to continue self-improvement.

Sabatini, Ginsburg, and Russell (2002) argued that certification is a benefit to practitioners in that it provides "a structure that clearly communicates the expectations of the profession, allowing practitioners to measure themselves and develop plans of self-improvement against established standards" (p. 2). Certification processes that create that structure afford adult basic educators more opportunities to work full-time (Perin, 1999; Sun, 2010). Most adult basic education teachers work part time, placing "limitations on the time teachers have available for professional development, opportunities for integrating what has been learned into instruction, and time available for collaboration with colleagues" (Smith & Gillespie, 2007). Thus, certification that allows more ABE instructors to work full-time would increase opportunities for and the effectiveness of professional development, thereby increasing the chances of improvement of instructional practices. However, the process of professionalization may be difficult when a course of study leading to a credential is not available in every state (as it is in K-12) due to differing entry qualification requirements across localities.

There are differing entry qualification requirements for ABE teachers at state and local levels. Belzer and Darkenwald-DeCola (2014) found that there is "only limited policy regulation in exchange for federal funding to the states for the provision of adult basic and literacy education with regard to professional preparation and professional

development of instructional staff' (p. 4). Instead, state or local agencies have control over the provision of services (e.g., in K-12 or post-secondary institutions) and implementation of policies resulting in "significant variation across states" (Belzer & Darkenwald-DeCola, 2014, p. 4). This variation in policy at the state level has contributed to the larger problem of insufficient communication of standards for ABE instructors at the national level.

Belzer and Darkenwald-DeCola (2014) found that out of 50 states reporting plus the District of Columbia, only 10 require teaching certification. Moreover, of those 10 states, seven only accept K-12 certification where the remaining three accept that or Adult Education certification. The dominance of K-12 certification suggests little to no training in adult learning is required for hire in the field. Moreover, this national scan reveals that the majority of states do not require post-secondary training or preparation in a particular content area.

There are currently 21 states that do not have any entry qualification requirements for hiring. Belzer and Darkenwald-DeCola (2014) argued that this does not necessarily mean that instructors have no qualifications; rather, the requirements are articulated at the local level, through individual programs. For example, five states where community colleges provide ABE programs require at least a Master's Degree, three states have no articulated entry qualification requirements but most instructors have at least a Bachelor's Degree, one state is in the process of requiring a Bachelor's Degree upon hire, and another is developing a teaching credential (Belzer & Darkenwald-DeCola, 2014). This is due to local control of the hiring institution or the city or town with a culture of local

control, lest state control make it increasingly difficult to find qualified teachers in underpopulated areas. Lack of state policy, therefore, may result in the likelihood of "inconsistent qualifications for teaching" across states (Belzer & Darkenwald-DeCola, 2014, p. 11).

This inconsistency may be mitigated by a set of teaching standards for teachers of ESL; however, these standards must be clearly communicated and monitored for effective implementation. In 2008, the International TESOL organization developed a framework of adult ESL and English as a Foreign Language (EFL) teaching standards. These standards do not only cover content, but professional guidelines for teacher candidates. Six of the eight domains delineate standards of effective practice for ESL/EFL teachers, such as planning, instruction, and assessment, whereas one of the eight standards covers content, but does not specify productive, receptive, or interactive skills. The final standard specifies principles of adult language learning, an area not addressed by previous standards. While the TESOL certificate that communicates these expectations is a recognized, accredited professional qualification, the focus is on teaching EFL learners, a context that is much different from those seeking ESL services with literacy needs. There is also no evidence of a mechanism to monitor implementation other than identifying the possibility of use (TESOL International Association, 2008) or an offering as a personal professional development plan (Jenkins, 2009).

Standards of effective practice.

Standards of effective practice include teacher competencies as well as content standards. The in-class demands of implementing these require practice and reflection. Instruction of adult learners differs from that of children due to factors influencing adults' motivation to learn, orientation toward learning, and learner self-concept (Knowles, Holton, & Swanson, 2011). In order to differentiate instruction, ABE instructors must develop specific skills to tailor instruction to these factors. ABE programs rely on the ability of instructors and volunteers to target these skills to learner needs through effective instructional practices.

During the first decade of the 21st century, the field of ABE strove to create a more standardized profession; albeit, a profession that is locally-derived. Within the past five years, standards-based education (i.e., standards of effective practice for teachers and content standards) movements have gained momentum in the field; however, the language around competencies and standards is varied, locally-driven, and implemented inconsistently (Belzer & Darkenwald, 2104; Young & Smith, 2006).

In 2003, the Office of Vocational and Adult Education (OVAE) enlisted the assistance of the American Institutes for Research to produce a guide to establish state adult education content standards. This guide, in conjunction with an online warehouse for ABE and ESL content standards was part and parcel of a standards-based initiative to "help states develop, pilot, implement, and promote...content standards (Young & Smith, 2006, p. 2) for ABE and ESL. The Adult Education Content Standards Warehouse contained content standards, curricular frameworks, resource guides, and learning

outcomes for ten states (Young & Smith, 2006), resulting in ten different sets of content standards, curricular frameworks, resource guides, and learning outcomes.

For example, the Texas Adult Education Standards (TAES) project began as an adaptation of Florida's Department of Education Adult Basic Education Curriculum Standards (Tomaszewski & Garcia, 2008), but quickly became a contextually-based, localized system of standards. Using the already established Equipped for the Future (EFF) standards often listed in popular ABE textbooks to focus emphasis on basic skills, Texas designed associated benchmarks to meet learner needs across the state. The implementation guide that was subsequently produced described phases of design, testing, review, data collection, revision, developing standards specialists, holding workshops, further testing statewide testing, creating learning activities, and holding a statewide conference on the subject (Tomaszewski & Garcia, 2008, p. 7). However, the state identified the stipulation that standards developed in early phases could be used if and only if it "[addressed] some TAES benchmark" (Tomaszewski & Garcia, 2008, p. 9). While the project described its resultant benchmarks as "reliable and valid guideposts" (Tomaszewski & Garcia, 2008. p. 9), they remained restricted by location.

During this time, other states designed state-specific adult ESL content standards encompassing key productive and receptive skills, as well as transitions and digital literacy skills (Young & Smith, 2006). For example, content standards mapped to the aforementioned skills in the *Massachusetts Adult Basic Education Curriculum Framework for English for Speakers of Other Languages* (Massachusetts Department of Education, 2005) contain benchmarks that align to specific National Reporting System

(NRS) functioning levels. Arizona expanded upon this by articulating criteria for the degree to which the student has mastered content within each NRS level (Arizona Department of Education, 2004). These examples illustrate specific, well-written content standards as well as indicators to measure performance; however, they vary by state and require "specific professional development about standards-based curriculum and assessment" (Young & Smith, 2006, p. 5) for successful implementation. Whereas K-12 ESL instructors have benefited from developed curricula and assessments that test achievement aligned to standards, such as those designed by the World-class Instructional Design and Assessment (WIDA) consortium (Young & Smith), applying much needed research investigating standards-based instruction and learner performance may be difficult in ABE.

Several organizations within the area of ESL also developed their own sets of content standards during this time. The Adult Literacy Education (ALE) Wiki Web contained lists of standards in development from twenty states, standards from the National Comprehensive Adult Student Assessment System (CASAS) Consortium, and a tentative set of standards from the international Teaching English to Speakers of other languages (TESOL) organization, but there was little to no consistency among the standards, nor was there a standard message on guidance as to implementation, as individual programs or states were required "to adapt or to use [resources] to guide their development of standards" (Young & Smith, 2006, p. 2) resulting in multiple sets of content standards.

While OVAE initially spearheaded the effort to promote state-level establishment of content standards in adult education as did the American Institutes for Research (2005) in their process guide for establishing state standards, the College and Career Readiness Standards (CCRS) for adult education extended this work into other arenas of adult life, solidifying links between adult education (e.g., basic skills), the workplace, and postsecondary learning. In an overview of the creation of CCRS, Pimentel (2013) stated that while standards-based education in adult education at the state level has resulted in "communicating clearer expectations for students, using content standards to improve curriculum and instruction, and creating professional development to help staff develop the expertise to implement standards (p. 1), the adoption of Common Core State Standards (CCSS) into selected readiness standards for adult learners may lead to consistent expectations between K-12 and adult education, streamline assessment, and allow adult learners to bypass remedial courses in post-secondary institutions.

It is imperative to note that CCRS are not mandated federal standards; rather, they provide a set of benchmarks condensed from the Common Core that states can choose to adopt. They were chosen by representatives from a variety of adult education stakeholders (e.g., adult education practitioners and representatives from community and technical colleges) (Pimentel, 2013). It is true that diversity of expertise was reflected on the panels choosing the standards in the area of English/Language Arts (ELA) and math to further forge the connection between adult education, work, and college; however, given the diversity in ABE programming nationwide, a degree of flexibility is needed within these standards. Pimentel (2013) alluded to this flexibility in delineating what the

standards are not intended to be, such as a fixed curriculum providing an exhaustive list of everything adult learners must know. However, while cited as missing from the standards by Pimentel (2013), the standards do not define supports for English language learners, learners with disabilities, or those seeking adult education for purposes other than work or post-secondary learning (e.g., community participation). As such, this attempt to define skills needed by all adult learners nationwide left out groups of learners served by ABE programming, leaving individual states to determine how to implement standards while meeting the needs of their learners.

Nationwide, the field of ABE lacks consistent message on standards implementation through effective practices given the variety of learning contexts and preparation of teachers. Development of these practices is critical to the success of undereducated adults given their unique motivations and orientations toward learning. Ongoing professional development of teachers in ABE has been proposed as a means to develop standardized, sound instructional practices (Cameron, 1981; Cervero, 1992; Perin, 1999; Shanahan, Meehan, & Mogge, 1994); however, professional development is executed differently and inconsistently across the country.

Professional development.

The process of professionalization as it has been defined above may not be able to accommodate the different kinds of training needs of adult basic educators based in large part on the diversity of types of adult education settings. Adult educators who enter professional development opportunities do not have the same training needs. Smith and

Gillespie (2007) argued that “teachers who have different content knowledge but lack understanding of how to apply their knowledge and skills to teaching adult learners require different kinds of training than those who lack both content-related knowledge and an understanding of methods for teaching adults” (p. 210). While professionalization through a credential can ensure teachers have specific knowledge of adult learning principles, it does not necessarily guarantee competence or expertise in both the content area (i.e., English language, reading, and math) and adult learning if the professionalization opportunity does not address both content and adult learning areas and the application of each in specific teaching contexts (Perin, 1999).

Johnson et. al (2010) cited lack of professional confidence as among the top five classroom challenges facing adult ESL instructors in Minnesota. Lack of knowledge of how to work with technology was a theme that emerged among study participants. This means that knowledge on the part of the instructor as well as managing equipment that may not work in an underfunded program was a concern. Another concern that emerged was lack of preparation on how to work with learners with disabilities. Knowledge of how to differentiate learning disability from other language and/or literacy issues was a primary concern.

Additionally, reading techniques was cited as lacking in formal preparation of these instructors. The questions that emerged from this was what role do content areas in professional credentialing of ESL instructors play in these issues and how professional development can address any gaps that exist. It is commonly known, however, that practitioners do not have access to a variety of best practice resources (Smith, 2016).

Although now there are extensive clearinghouses at the national level devoted to research and dissemination of research and practice available to the profession. The resources are selected for inclusion after thorough review, both internal and external, by subject matter experts vetted by the U.S. Department of Education, Office of Career, Technical, and Adult Education (OCTAE) (Literacy Information and Communication System, 2017).

Research is scant in the adult literacy field, but what is available has few outlets for practitioners to access. In a study on the role of professional development in bridging research and practice in ABE, Smith (2016) argued that "funders rarely earmark money for disseminating research, leaving researchers few resources to create additional materials (beyond journal articles and reports) that are accessible to practitioners and useable by professional developers" (p. 40). Patterson (2016) argued that adult educators tend to not use research to inform practice unless it is part of a graduate study program. The question that arises, then, is how to make research findings both accessible and usable by practitioners. A possible answer to this question is to identify outlets that "support the most change and provide the best chance of promoting evidence-based practice...that are inquiry-based, encourage reflection, and create a community of practice" (Smith, 2016, p. 41). Patterson (2016) advocated for professional development that takes the form of adult education in its early stages, a grassroots approach in which participants "collaborate to understand and digest research" (p. 32). To do so, however, would present opportunity for development without incentive for participation.

One way to incentivize participation is to conduct learning circles in which participants engage with and reflect upon research. In New Zealand, teachers were

experiencing powerlessness in the face of prescribed national curricula that left little room for innovation. Thus, there was forced change on a fixed timeline leaving teachers feeling unempowered "by change efforts that remain decided by others and an emphasis on 'what' to learn" (Lovett & Gilmore, p. 192) and not how it is implemented in classroom. The link between the two reflects professional learning at a later stage in which teachers who engaged in metacognition about their practice obtained improved student outcomes (Muijs, Kyriakides, van der Werf, Creemers, Timperley, & Earl, 2014). Therefore, in a study implementing a method of professional development known as quality learning circles, teachers were challenged to integrate the 'what' with challenges of daily practice (how). Quality learning circles are a form of professional development in which teachers can determine the 'what' to meet local needs alongside national agendas (Lovett & Gilmore, 2003).

Forced change on a fixed timeline in terms of state standards is the current trend in ABE programs at the state and local level; however, programs are left to determine the 'how' of implementation given varied teaching contexts and teacher experience. In the United States, test-based knowledge is becoming increasingly important in ABE; however, given the state and local control over adult education policy, mandates are locally-driven, creating locally-driven professional development opportunities. Appleton, Farina, Holzer, Kotelawala, and Trushkowsky (2017) found that professional development that was peer-led and grounded in research created "a place where all voices are heard, where different levels of...experience are welcome, where persistence, curiosity, and elegance are valued in equal measure, and where you formulate your own

thinking and from the thinking of others" (p.38). This method of learning called a teacher's circle included those varied experience with the content area as well as the credentials in that content area, where they practiced methods of teaching and learning, creating the learning environment in which they would teach ABE learners. A model of accountability was established as the leaders of the group would shift throughout time. This model takes into account the backgrounds of teachers, those of their students, and the various ways adult learners can use professional development to problem-solve.

However, the example above illustrates a locally-driven way in which to address knowledge gaps. While public schools provide the avenue for delivery in some states, many states provide ABE through the community college system, which can exacerbate the issue of local control and lack of central standards, creating an additional set of standards unique to the location.

Considering context.

Teaching context becomes more salient to the concept of professionalization when examining the diversity of ABE contexts nationwide. Sun (2010) argued that adult educators in English language learning settings tend not to view English language teaching as a profession. Many of the instructors are volunteers and those who are employed must follow high standards with no benefits, leading to high turnover (Smith & Gillespie, 2007; Sun, 2010). For those programs operated by volunteers, it may be difficult to conceive of professionalization as a benefit to their instructional practices.

Nationwide, there are multiple state and locally-driven conceptualizations of what professionalization must entail to develop more competent, long term adult basic educators given the diversity of training needs and employment status of instructors across ABE settings. The common definition of professionalization may not engender the development of effective instructional practices across ABE settings nationwide, echoing Sabatini, Ginsburg, and Russell's (2002) claim that there is a "concern for balancing the need to establish and maintain professional standards with the need to avoid screening out good but non-credentialed teachers" (p. 3). Making explicit just what the products of the professionalization must entail nationwide remains a pervasive issue in the field due to the need to counterbalance the benefits of clearly communicated expectations of a profession with the diversity of local ABE programs.

Systems of Professionalization in Minnesota: Emphasis on Content and Implementation

As Cameron (1981), Cervero (1992), Freidson (1970, 1986), Perin (1999), and Shanahan, Meehan, and Mogge (1994) contended, expertise, the product of professionalization, develops as a result of the following: (a) entry qualification requirements in the form of certification (i.e., state issued licenses and certificates that emphasize teacher competencies), (b) implementation of standards (i.e., content standards), and (c) initial and ongoing professional development and when policies differ across states, professionalization becomes increasingly difficult.

However, the state of Minnesota has been a leader in the preparation and continued development of ABE practitioners since the late 1970s. In 1978, a committee of teachers, administrators, and faculty in postsecondary institutions convened to plan certification requirements for ABE teachers in Minnesota (ABE Network News, 1978). At that time, an endorsement option for instructors having taught, for pay, for at least 2 years was proposed, in addition to an initial licensure option that allowed inexperienced teachers with 29 hours of graduate work to obtain licensure or 30 hours of undergraduate work in foundations in adult education, adult psychology, adult counseling, administration, counseling, career education, curriculum and assessment, reading and mathematics methods, and a practicum (ABE Network News, 1978). Despite ongoing arguments that ABE instructors worked primarily part-time with no benefits or job security (Park, 1989), it was not until 1983 that the Minnesota Board of Teaching approved of the endorsement option only.

Certification and licensing.

In response to a call to develop clear professional expectations in the state of Minnesota, a formal credentialing system was developed through the Department of Education. After several years of research in the area of credentialing for ABE/GED teachers, it was recognized in 1983 that a conditional endorsement to a valid Minnesota teaching license become available for ABE teachers, who frequently worked part-time with no benefits or job security (Park 1989). In 1991, the Minnesota Board of Teaching (MNBOT) amended existing qualifications for licensure by allowing licensure for those with academic preparation in adult education instructional principles (Copeland, 1993).

Around the year 2000, MNBOT agreed that those without a license could choose an initial licensure option. Both options offered courses covering strategies for teaching adult learners, adult learning and development, and a series of adult literacy courses introducing learner demographics and ABE settings as well as assessment and methods of instruction (Copeland, 1993).

Other ABE certifications in Minnesota include the nationally recognized Teaching English and a Foreign Language (TEFL) certificate, the Adult ESL certificate, and the Adult Basic Education Certificate, all of which can supplement existing licensure or certification. These certificates, however, are not teaching licenses, though conditions of hire vary by location. To be hired at a community education district, a license is required, but this may not be the case at a community-based organization (Park 1989). These differences in conditions for hire reflect the findings of Belzer and Darkenwald-DeCola's (2014) national scan of entry qualification requirements.

Content standards.

Three main documents guide the content of ABE classrooms in Minnesota, each focusing on critical areas of knowledge adult students need. These documents include the College and Career Readiness Standards, the Transitions Integration Framework, and the Northstar Digital Literacy Project. Each introduce three documents and discuss benefits of implementing standards. Each provide standards for essential skills, including basic literacy and math skills, transitions skills, and digital literacy skills respectively. The reasoning behind adoption of these standards magnifies the necessity of having

consistent signposts for skills learners will have and be able to articulate to prospective employers and admissions counselors as they make progress through and across programs (Vinogradov, 2015).

As of 2015, Minnesota adopted the College and Career Readiness standards to define the basic skills adult learners will need to participate in the world of work and post-secondary education. However, the state has recognized the necessity of wider community participation for older learners, and others whose goals do not align with CCRS, especially those at a lower level, according to a state professional development survey (Frank, 2017). For many of those learners, their reading needs are not reflected in CCRS ELA standards, specifically, alphabetics and fluency. Therefore, Minnesota combined the state CCSS with CCRS to form the Reading Foundational Skills to meet the instructional needs of lower-level learners frequenting Minnesota's programs (Frank, 2017).

In addition to basic skills standards, Minnesota ABE designed the Transitions Integration Framework (TIF) to provide guidance to ABE programs and instructors on effective integration of transitions skills into instruction (ATLAS, 2016). More specifically, the framework aims to integrate academic, employability, and career skills across all levels of ABE, including those whose goals do not align with work or post-secondary education. For example, a skill in each area, or lens, contains a set of subskills that are expanded using examples that increase in complexity across community, school, and work settings (ATLAS, 2016). The framework consists of six lenses, including effective communication, learning strategies, critical thinking, self-management,

developing a future pathway, and navigating systems (ATLAS, 2016). When the TIF was released in 2013, it included Numeracy and Academic Language lenses that have since been removed when the state adopted CCRS in 2015, which covers mathematical thinking in its math strand as well as key literacy skills in the English Language Arts and Literacy section.

The third document that completes the set of content standards in Minnesota are the Northstar Digital Literacy Standards. These standards define basic skills needed to perform tasks on computers and online. This project was developed in response to the recession in 2008 to equip learners with digital literacy skills needed for employment; however, it has since developed sets of standards and assessments in multiple areas, including basic computer skills, the worldwide web, windows, Mac OS X, email, Word, social media, Excel, PowerPoint, and information literacy (Northstar Digital Literacy Project, 2017). As of 2105, Minnesota Adult Basic Education adopted the standards as part of statewide content standards and integrated them into the Adult Diploma Program. However, it is imperative to note that Northstar is not a curriculum; rather, it is a set of standards and assessments with no teacher or administrator notes to guide implementation.

Professional development.

To fill in gaps in formal acquired not addressed in a credentialing program, professional development must be offered. However, as argued by Smith (2016), ABE practitioners have little access to resources, such as research, that are applicable to adult

education. To address this issue, the Minnesota Department of Education has continued to fund continuing professional development for teachers. This system now known as the ABE Teaching and Learning Advancement System (ATLAS), which provides the lion's share of professional development for ABE practitioners in the state of Minnesota. ATLAS offers a variety of resources and professional development formats, including learning circles, cohorts of practitioners working toward a similar goal, and webinars.

The original United States Office of Education (USOE) grants that founded the ABE programs back in the 70's and 80's provided some funding for professional development. It was this original funding that initiated ABE programs at St Cloud, Mankato and the University of Minnesota, Twin Cities. The Minnesota State Department of Education administered these funds which also included additional funding for workshops and other professional development formats. The University of Minnesota was funded to run a newsletter, and the state initiated its own professional workshop system that went through the University, then St Thomas, and now ATLAS. This is what funds the summer intensive.

Minnesota ABE professional development is offered in multiple formats that serve as alternative to the traditional in-service workshop or one-stop conference session. Henry (2013) argued that ABE practitioners in Kentucky highlighted workshops and collaboration with colleagues as the most useful forms of professional development for developing fluency and vocabulary component reading skills, for example. Professional development standards have been established that integrate collaboration and intensive workshops, as well as evidence-based best practices. In particular, the study circle format

in which participants read, reflect, enact concepts introduced in research and observe colleagues through three spread out meetings introduces the elements of accountability and teacher agency, which Lovett and Gilmore (2003) cited as absent from most professional development for teachers.

In Minnesota, study circles allow practitioners to engage in content-based professional development by means of intensive collaboration. Among the ten standards of ABE professional development in Minnesota, access to research in content areas, reflection, evaluation, and support during the process are integral to each (Minnesota ABE Professional Development System, 2009). Ginsberg (2011) argued for content-based professional development grounded in continual collaboration between peers, citing adult numeracy instructors as lacking sufficient content knowledge when they begin instruction. Portions of study circles are peer-led, in which participants actively observe one another, reflect upon, and discuss results of implementation of research-based practices. While Appleton et al. (2017) argued for research-based, peer-led professional development, study circles in Minnesota partner with University faculty where practitioners can actively engage in research with researchers (Patterson, 2016). However, practitioners must be connected with this University to be aware of study circle offerings.

While credentialing appears to offer formal knowledge in the area of adult learning in Minnesota, the ongoing standardization of content and isolation of some practitioners from professional development opportunities presents a challenge for proponents of the professionalization of the field. This study intends to investigate how

components of an ABE credentialing program can connect to standards implementation and ongoing professional development related to one's teaching context. An understanding of the connection between these three components may lead ABE practitioners toward a better understanding of how standards of the profession are be communicated, understood, and implemented (Cameron, 1981; Cervero, 1992; Leigh, 2014; Perin, 1999; Shanahan, Meehan, & Mogge, 1994).

Methodology

The purpose of this study is to examine how standards of this profession are communicated, understood, and implemented through a credentialing program. It intends to link descriptions of what expertise looks like in the field of ABE and how they developed it through participation in a unique credentialing process--as well as implications for ongoing teacher development. Since this study seeks a description of expertise development through one program, an interpretive case study approach (Merriam, 1998) was used as described below.

Methods

Participants.

The participants in the study are past and current enrollees in the ABE licensure program at the University of Minnesota. More participants were enrolled in the initial licensure program than the endorsement. The majority of participants were women, ranging in age from their late twenties to mid-sixties. Two men, one in his mid-thirties

and the other in his late fifties, also participated. All teach a variety of content and learners and work at either a community-based organization (CBO), drop-in center, or school district site. They may also take on several roles, including volunteer, tutor (one-on-one instruction), teacher or administrator. Some were enrolled in the Master's program in adult education concurrently with the licensure program. There was an even mix of pre-service and in-service status as well as those having completed the program during the recent years the standards implementation versus those who completed it much earlier. The latter distinction is important to make as participants' descriptions of expertise development may shift depending on the content they encountered while enrolled.

Information.

Five types of information were collected: a) descriptive information through participant stories of how they came to the field of ABE, including educational background and work experience, b) information from interviews covering the participants' understanding of what they learned in the program, how they learned it, and its utility in the field, c) standards of effective practice aligning to participant descriptions of knowledge gained in the program, d) documents from the participants' licensure coursework, and e) initial and ongoing professional development required post-participation in the licensure program.

Procedures.

There were four main tasks completed for study procedures. These included a)

selecting participants, b) conducting interviews, c) collecting relevant program and participant documents, and d) peer examination.

Selection of participants began with lists of recent program participants the program coordinator provided and who I knew had the license from experience in the field. Participants were selected based on prior knowledge of the following criteria: a) when they participated in the program, b) whether they were pre-service or in-service, c) their program option, d) degree of prior teaching experience, and e) their current teaching contexts. Participants were selected for variety. If the interviewee could not answer questions with sufficient detail after probes and follow-up questions, secondary participants were selected (Morse, 1989).

A third party performed a preliminary interview of me in order to identify potential assumptions, biases, and values that I brought to the interview as a measure of internal validity. For interviews of participants, consent to be recorded was secured prior to all interviews. Interviews were recorded using a Smart Recorder application. Although the recordings captured all information discussed in the interviews, a pen and notepad was required to periodically mark notes or follow-up questions, while ensuring that the participant was not distracted by occasional writing during face-to-face interviews. Interviews were transcribed verbatim and listened to several times to check for accuracy.

Two matrices included all Standards of Effective Practice (SEP) and content standards for ABE teachers were retrieved from my files. Other documents include program syllabi, assignment descriptions, and lesson plans completed by program participants. These particular documents were chosen to account for standard knowledge

addressed in the program.

Finally, colleagues were asked to comment on findings in informal discussions throughout data collection. This was done to continuously to control for threats to internal validity (Merriam, 1998).

Analyses.

Analyses involved two sets of data: a) interview data, including descriptive information about participants and participant descriptions of expertise through professionalization and b) analysis of program and participant documents delineating standards of effective practice for teachers of ABE and their applications.

All interviews were transcribed and listened to multiple times to check for accuracy. Hard copies of transcripts were categorized based on when the participant was enrolled and their pre-service or in-service status. Statements or expressions referring to what participants learned in relation to specific program components were selected, including those specifically mentioned as missing from the program and potentially useful for further development of expertise. Keywords were entered into ATLAS.ti to ensure all statements were located. Additionally, statements or expressions referring to utility of prior experience in the field *and* the program were selected to address integration of prior knowledge and experience of program participants. Topics were identified, described, and clustered together. Connections were made between topic clusters to form codes, codes were condensed to form categories, and categories were renamed to reflect patterns across data to form themes that convey results in a relatable way.

Chapter 2: Review of Literature

In this chapter, I will examine different perspectives of the role of professionalization in the careers of ABE professionals. Professionalization of the ABE teacher workforce has been a slow process in the past. However, within the past five years, the rate of change in the profession has increased creating new opportunities for and demands on instructional staff. Therefore, it is critical to understand perspectives on the process to appreciate the ways in which they have created the conditions in which programs developing ABE teacher expertise must operate. Three perspectives will be presented, including a) how it may assure high quality practices, b) how it may restrict diverse practices and programs, and c) how contextualized professionalization leads to contextualized expertise. A conceptual framework will be proposed to account for how knowledge develops across multiple settings. Finally, a link from the case to the third perspective will be explained.

Perspectives on the Process of ABE Professionalization

In order to illustrate the process of ABE professionalization as a concept, it will be necessary to review literature characterizing ABE professionalization, specifically (a) perspectives on the impact of certificates and teaching credentials on the ABE workforce, (b) forms of literacy content knowledge professional development, (c) forms of English language professional development, (d) perspectives on standards implementation, and (e) the results of efforts to professionalize occupations outside of ABE.

These bodies of literature present three different perspectives on what the efforts toward professionalization yield for practitioners in the field of ABE. The first perspective advocates for credentialing that communicates standards of the profession and professional development, linking these two products to sound instructional practices and enhancement of professional prestige. However, the second perspective highlights the restrictive nature of standardization, pointing to the impracticality of standardization of systems given the diversity of the teacher workforce as well as the student demographic. Finally, the third perspective follows from the first in promotion of continual development of professional practices; however, these opportunities for development must be linked to one's ABE context to ensure sound instructional practices.

Perspective 1: Professionalization Assures High Quality Instruction.

The research on professionalization of adult basic educators suggests that practitioners can develop "expertise in effective classroom methods" (Perin, 1999) through a product such as a credential. Merriam's (1982) description of a philosophic orientation toward practice underpins the notion that professionalization leads to expertise in effective classroom methods. The practical nature of one's philosophic orientation allows practitioners to form "goals, values, and attitudes to strive for" (p. 90). These goals, values, and attitudes are the basis for decisions. Practitioners are therefore "aware of what they are doing and why they are doing it" (Merriam, 1982, p. 90). This informed awareness ensures that teachers have special knowledge about adult learning and literacy content areas which could assure high quality teaching.

Several foundational studies state that professionalization of the ABE field could assure high quality teaching (Cameron, 1981; Cervero, 1992; Perin, 1999; Shanahan, Meehan, & Mogge, 1994). Their ontological orientation is that high quality teaching involves standardization of procedures such as method of instruction. In terms of epistemology, knowledge is delivered through another structured entity, such as a university, rather than constructed by learners. Unstructured practices may promote the use of unqualified teachers. Assuring effective instruction involves a certification or credentialing system to establish the necessary standardization and structure that filters out unqualified teachers (Cameron, 1981; Cervero, 1992).

The standardization and structure of sound instructional practices are also promoted by professional development in an effort to increase teacher competence (Shanahan, Meehan, & Mogge, 1994). For example, ABE practitioners in Kentucky highlighted workshops and collaboration with colleagues as the most useful forms of professional development for developing fluency and vocabulary component reading skills (Henry, 2013). This indicates that some professional development practices are meeting the needs of specific literacy content knowledge requirements.

Professional development practices and credentialing are examples of efforts to accommodate demands of accountability, institutional sustainability, and legitimacy of practices. Sabatini, Ginsburg, and Russell (2002) argued that these efforts reflect a movement toward professional growth that is “valid and distinct to ABE and is recognized or affirmed by school boards, employers, and the local community” (p. 3). In particular, the Saint Paul Public School District saw it as a symbol of credibility for

teachers as ABE professionals and required it as of 1983 (Hanson & Bryant, 2005). The validity and distinctiveness of the professional growth reflects an enhanced prestige associated with field and its resultant practices (Perin, 1999).

Standards of accountability through a state-issued license can provide ABE practitioners with recognition of their expertise. Hanson and Bryant (2005) noted in their history of ABE in Saint Paul that a credential afforded ABE teachers with the same benefits as those with a K-12 license. K-12 teachers with seniority could not replace an a less experienced ABE teacher, for example, providing job security for ABE teachers. Therefore, the provision of a license through the Department of Education may enhance the status and appreciation of the skill set of the ABE teacher within a school district and the surrounding community (Park, 1989).

Standards of accountability were also present in women's activist organizations solidifying feminist concerns in the political arena in various countries around the world. Markowitz and Tice (2002) contended that professionalizing activist organizations in North and South America led to the reification of feminist concerns in the mainstream by enabling formerly marginalized groups to become part of feminist groups, leading to mainstream legitimacy and validation of organizations and the concerns they address.

Arguably, the results of credentialing and professional development practices are suggestive of legitimacy of practices within an occupation since they are directly tied to the learning needs of adult literacy learners. In the field of human resource development (HRD), Hatcher (2006) described legitimacy of practices as "meaningful only when it is

justified by an ethical or value-laden assumption accepted by recognized constituents" (p. 71). When professional growth through establishment of standards of accountability is limited by lack of formal teacher education or in-service professional development, instructional practices may not be recognized by the local school district and other supporting agencies in the community (Sabatini, Ginsburg, & Russell, 2002; Sun, 2010), obfuscating the demand for adult literacy services in the public arena.

Similarly, it has been suggested in the literature on certification in ABE that there is a public perception of illegitimacy of ABE instructors' theoretical and practical teaching knowledge when they are not certified (Perin, 1999; Smith, 2005). For example, Smith (2005) discovered a public concern over supervision and evaluation of high school students by uncertified ABE teachers. In Smith's (2005) investigation, program directors maintained that ABE certification must be distinct from K-12 credentials in order to be legitimate by Hatcher's (2006) definition. That is, teacher preparation in adult learning, a distinctly different type of training required by ABE instructors and one that is not required of K-12 teachers, is needed in order for ABE instructional practices to be recognized as high quality and legitimate.

The competencies required for effective instruction of adult learners requires specialized conceptual knowledge that reflects principles of adult learning (Darkenwald & Merriam, 1982). Even the standards condensed from the Common Core for adult learners identify key differences between the learning needs of adults and those of children. The standards include the caveat that they are not meant to be applied universally given other competing learner goals and needs (Pimentel, 2013). Hanson and

Bryant (2005) noted that Saint Paul ABE programs saw a license covering these competencies as evidence of "[improved] instruction and increased credibility as a professional teacher" (p. 50). ABE teachers with these qualifications will provide "better service to our clients and greater professionalization for ourselves" (ABE Network News, 1978).

Without specialized knowledge in teaching adult learners, teachers may feel inadequately prepared to provide quality instruction. Johnson et al. (2010) cited lack of professional confidence as among the top five classroom challenges facing adult ESL teachers in Minnesota. In particular, teachers reported lack of confidence teaching certain content areas. This follows from state law for teachers working in school district-based ABE programs stating that their license can be in any content area. Given the fact that many who have or are working toward teaching licenses have "specialized in working with different ages, grades and content areas" (Johnson et al., 2010, p. 20) and yet report these challenges, it stands to reason that a K-12 license may not suffice in an adult education setting, as practitioners may "lack training in a number of areas, including adult learning theory or creating and using adult-appropriate learning materials" (Johnson et al., 2010, p. 35). The process of professionalization, therefore, may address these gaps in knowledge.

Engaging in the professionalization process through credentialing may also solidify a teacher's identity as an expert entitled to benefits commensurate with that expertise, thereby lending prestige to the profession. Park (1989) argued that initial licensure in ABE for those without a primary or secondary license would validate the

expertise of adult literacy as well as the value of adult literacy education. When Saint Paul required the endorsement in the early eighties, Hanson and Bryant (2005) highlighted a step towards this validation by citing job security as an advantage of holding an ABE license.

However, not all professionalization opportunities meet the training needs of instructors due to differences in instructors' prior educational experiences, employment status, learner demographics, and learner needs across settings. When the state does not offer formal teacher preparation for ABE, the only vehicle for teacher preparation, professional development, may not be meeting all practitioner needs with regard to specific content knowledge (Henry, 2013). Moreover, formal teacher preparation resulting in certification may be inhibiting creative instructional practices (Smith, 2010), meaning standardization of practices through professionalization could invalidate the unique contributions of voluntary or part time instructors at nontraditional and small community ABE facilities.

Perspective 2: Professionalization Restricts Teacher and Program Diversity.

Foundational literature on professionalizing the ABE field has also presented a range of disadvantages mostly linked to systems of credentialing. Collins (1992) and James (1981) highlighted these difficulties with standardization of hiring requirements. Their ontological orientation is that high quality teaching involves a diverse teacher workforce in a variety of programming, where the notion of quality of instruction is dependent on that teacher diversity and variety of ABE programming. In terms of

epistemology, knowledge is delivered through multiple sources and constructed through innovative and creative processes.

The main argument presented by Collins (1992) and James (1981) is that credentialing is restrictive to teacher and program diversity. Specifically, standardization of credentialing is not practical due to the diversity of adult literacy staff. Depending on the type of organization, adult literacy practitioners can be part-time, volunteer, or located in rural areas without access to credentialing programs (Collins, 1992; James, 1981).

Thus, the distinct nature of the adult literacy practitioner may be lost when competent, unlicensed staff or those with more informal teacher preparation are restricted from being hired or are eliminated (Sabatini, Ginsburg, & Russell, 2002). For example, Sabatini, Ginsburg, and Russell (2002) found that staff with an emic perspective of communities, such as some part time staff and volunteers are often eliminated or restricted from positions, thereby limiting access to the opportunity to improve instruction with local knowledge of the facility's clientele. Sabatini, Ginsburg, and Russell (2002) then extended this claim, indicating that a focus on credentialing places key stakeholders in the field of ABE in jeopardy, as staff recruited by community-based programs may not have the educational background to attain a credential. Programs managed by part-time staff and volunteers also may not have the incentive to engage in formal teacher preparation.

Collins (1992) and James (1981) also argued that when ABE is part of the K-12 system, hiring may favor those with a K-12 license over those with an ABE credential, thereby placing a limitation on hiring and limiting the diversity of the teacher workforce. When there is alignment of ABE with the K-12 system, several concerns about implementation of systems that impact the validity of adult literacy practices emerge. The most prevalent and relevant to professionalization is the mechanism put in place to establish a valid adult credential. Tests, such as the GED, are benchmarked against secondary curriculum standards. Sabatini, Ginsburg, and Russell (2002) argued that the credential in this sense impacts the validity of adult literacy instructional practices, as these curriculum standards may not be relevant to the literacy learning needs of adult learners in unique communities.

Literature presenting dissenting views on professionalization are also of the critical inquiry paradigm where challenges in the profession are shaped by social, political, cultural, and economic values (Guba & Lincoln, 1998). Formal knowledge is controlled, created, and disseminated by oppressive societal systems (Cervero, 1989). These systems determine which knowledge is deemed worthy of knowing, lessening control teachers have over their autonomy and accountability (Rocco, 2009).

When institutional agendas do not align with those of the instructors or clients, there is an exclusionary aspect of professionalization, which Markowitz and Tice (2002) termed a paradox of professionalization. In their study on women's activist organizations, they found that on the one hand, a field can become legitimate in mainstream political arenas and gain institutional sustainability through

professionalization of organizations. On the other hand, efforts toward professionalization have "frequently contributed to the persistence or creation of social hierarchies within and between…organizations, as well as subversion—or more generously—a reorientation of…agendas and strategies" (p. 954). This reiterates Sabatini, Ginsburg, and Russell (2002) as well as Perin's (1999) claim that there are key stakeholders (i.e., community-based staff, volunteers, and part-time instructors) that are invariably excluded from participation in professionalization opportunities due to their employment status and prior education. These authors also argued that there are also adult literacy students who may not benefit from the teaching strategies promoted in credentialing and professional development controlled by the government and state agencies, creating a monopoly.

Working conditions created by government or state agency control have been noted by Johnson et al. (2010) as requiring systemic change to be properly addressed. This appears to be an insurmountable endeavor to undertake, as arguments against licensure have included the administrative convenience of hiring part-time elementary or secondary school teachers (ABE Network News, 1978; Hanson & Bryant, 2005). Moreover, health and retirement benefits for contracted teachers meant incurring additional expenses for the school district when ABE licensure was introduced in Saint Paul (Hanson & Bryant, 2005), creating conditions where few contract positions are available. This reflects competition among professionals over "power, status, and money" (Cervero, 1989, p. 518), rather than developing competence as ABE teachers.

Furthermore, opponents of professionalization cite the same adult learning assumptions as reasons to resist standardization of instructional practices because mandates for initial and sustained education are issued by outside forces (Rocco, 2009). The assumption that professionals are self-directed learners, for instance, is challenged when institutions enforce standards for professional accountability, reducing the autonomy of teachers to pursue continuing education as they see fit (Ohliger, 1978). This body of literature in the critical science tradition does not view competence as the problem, rather the problem resides in the societal systems (including organizations) that create conditions where the professional has no control or influence over the development of their expertise (Cervero, 1989).

Perspective 3: Professionalization Must Be Contextualized

Those who hold a different perspective on professionalization validate the importance of developing competent practitioners (Henry, 2013; Kestner, 2002; Smith, 2010; Smith & Gillespie, 2007). However, they emphasize the importance of one's teaching context in developing effective instructional practices. The ontological orientation of many of these studies maintains that the concept of effective instructional practices is subjective given the sheer diversity of learner needs among programs. Epistemologically, professional competence must be co-constructed among colleagues and then reimagined within one's respective ABE context.

For example, in a practitioner study modeling best practices in adult numeracy instruction, Appleton et al. (2017) argued that peer-led teacher circles allowed teachers

with varying levels of formally-derived expertise to engage in ongoing collaboration with peers to determine effective instructional methods. In this example, teachers, rather than the credential establish standards of accountability for one another through co-constructed problem-posing and problem-solving to address varying levels of numeracy expertise.

Additionally, the availability of a credential and professional development opportunities may not ensure competence in literacy content areas and adult learning if new knowledge cannot be applied to the work context. This requires contextualizing professionalization within the learning environment, taking into account formal and informal contexts (Merriam, Caffarella, & Baumgartner, 2007). Henry (2013) found that while some forms of professional development were useful for instruction of specific component reading skills, those with and without a teaching credential required more and different forms of professional development to meet content area needs specific to their learner demographics. Smith (2010) came to a similar conclusion, arguing that the kinds of knowledge constructed in professional development as well as the way in which knowledge is delivered needs to be contextualized in the working conditions of ABE teachers.

Research in the field of social work has demonstrated that the process of professionalization is part and parcel of developing and grounding professionals' identities in practice (Leigh, 2014). A core component of the profession and a required form of expertise that can only be developed through experience are coping mechanisms for dealing with pressures of the job. Where social workers must contend with

professional experiences impacting their personal lives (Leigh, 2014), ABE teachers must reconcile difficult teaching environments placing multiple levels together in open enrollment programs with the level of training they have had (Johnson et al., 2010). Coping mechanisms for both professions include engagement with other professionals for the betterment of their craft rather than for financial gain, status, or power (Johnson et. al, 2010; Leigh, 2014). Johnson et al. (2010) recommended professional development contextualized in the challenging working conditions of ABE practitioners to meet their training needs, which Appleton et al. (2017) illustrated through peer-led teacher circles.

An example of a contextualized professionalization is reflected in Collins and Evans' (2002) concept of an experience-based expert. The concept of an experience-based expert encompasses unique contributions that those unlicensed or educated by more informal means make to a field. In a study contrasting health educators and community health workers, Gilkey, Garcia, and Rush (2011) argued that the traditional model of professionalization that employs credentials and professional development to distinguish experts from non-experts is "inadequate to serve practitioners who value the emic perspective derived from closeness to, rather than distinction from, lay populations" (p. 181). Credential-based experts, such as health educators, may not always have the experientially-derived, local and representative knowledge of a particular community (Gilkey, Garcia, and Rush, 2011), similar to those ABE practitioners recruited by community-based sites.

As such, the label of an experience-based expert acknowledges the expertise of those who may be systematically excluded from participation in professionalization

opportunities due to their prior education or lack of incentive to participate due to their volunteer or part time status. Therefore, the process of professionalization in ABE must integrate experience-based experts as informers of teacher development to demonstrate an effort to accommodate the stakeholders in unique and diverse settings of ABE practice.

Conceptual Framework

Given these three differing perspectives on the professionalization of the ABE workforce, it is apparent that no single theory exists to explain the nuanced nature of ABE teacher development. How does one understand how to become an expert? What does it mean to be an expert in ABE? To underpin a characterization of the process of ABE professionalization, a concept integrating formally derived knowledge with experiential knowledge will be used to illustrate critical aspects of ABE teacher development through an online licensure program, namely, adaptive expertise.

The concept of expertise will be illustrated in fields that lend considerations for how ABE professionalization shapes its development. A discussion of learning environments will situate expertise as a product of professionalization and elucidate various ways in which it could develop.

Adaptive expertise.

When considering the process of professionalization in the field of ABE, the concept of adaptive expertise supports development of formal and experiential knowledge. Adaptive expertise involves more than applying rules to solve short-term

problems (Brophy, Hodge, & Bransford, 2004); rather, rules must have a reason for application and can be applied flexibly and creatively to novel situations (Hatano, 1982, 1988, 2003). In the former, the quality of knowledge is superficial and expertise routine. However, the latter definition qualifies knowledge as deep and expertise as adaptive.

Perception of one's identity as an expert may impact development of adaptive expertise (Mylopoulos & Regehr, 2009). Student models of expertise reveal that they identify more as a learner than an expert; therefore, innovation in problem-solving is "beyond the scope of their responsibilities" (Mylopoulos & Regehr, 2009, p. 127). Similarly, in the field of ABE, Johnson et al (2010) cited lack of confidence and experience teaching in certain content areas, as did some respondents in a survey on writing instructional strategies (Fernandez, Peyton, & Schaetzel; 2017). This suggests that ABE teachers may identify as a learner rather than an expert in their field, though more research is needed on just what trained ABE teachers are doing (i.e., applying routine or adaptive expertise) in practice to address their gaps in knowledge.

Hatano (1982, 1988, 2003) distinguished routine expertise from adaptive expertise through observations of skill application in familiar versus novel situations. Findings indicated that the efficiency with which skills were applied decreased when situations changed for some professionals, suggesting expertise of the routine where procedural knowledge, that is, rote understanding of steps (Matz, 1980), is understood but reasons why the procedure worked or failed are not. However, for those who successfully applied skills to novel situations, there was evidence of a conceptual understanding in addition to the procedures (Gray & Tall, 1994). For the success or failure of a procedure, new procedures were created to address the problem. That is,

experts notice patterns and make decisions efficiently, revealing that they have a deep quality of knowledge that allows them to apply it flexibly to novel situations (Dufresne, Gerace, Hardiman, & Mestre, 1992; Sternberg, 2003).

ABE teachers may be exhibiting adaptive expertise, but not identifying it as such. In a survey of writing instruction in adult ESL programs, Fernandez et al. (2017) found that some participants regarded their instructional strategies as an accomplishment. Additionally, some reported instances of increased student motivation when they made progress, addressing potential gaps in knowledge through modification of instructional strategy to meet differing learner needs. A similar trend can be noted in discussions of technology use among adult educators. According to Inverso, Kobrin, and Hashmi (2017), just as adult educators continually "adapt to new learning theories and instructional techniques, [they] must adapt to innovations in educational technology" (p. 58). The contention that they adapt to novel problems was made, but evidence of these adaptations is missing from the literature on adaptive expertise in ABE.

Comparing different types of experts reveals emphasis on deep conceptual understanding of procedures in multiple contexts as key to solving problems in novel situations. Much of the expertise research compares experts with novices where the former has extensive experience comparatively (Chi, Feltovich, & Glaser, 1981; Johnson, Hassebrock, Duran, & Moller, 1982). However, comparing the skills of two kinds of experts (i.e., same industry but different jobs) may reveal that those with a conceptual understanding in addition to procedural excel at creative problem-solving. In a comparison of problem-solving performance between two types of experts in the restaurant industry (restaurant managers and business consultants), Barnett and

Koslowski (2002) found that a higher the degree of variety of problems each expert experiences may result in an "enhanced theoretical understanding" (p. 260) of problems in the field. There is a foundation for this finding of breadth of experience as a contributor of transfer of learning to novel situations with the same theoretical foundation (Brown, 1989; Gick & Holyoak, 1983; Holyoak, 1981).

Breadth of training and experience teaching is typical in the field of ABE. In the survey of writing instructional strategies, Fernandez et al. (2017) revealed that participants have received a variety of preparation in teaching adult ESL. According to the authors, "38% responded that they held a K-12 credential; 15% of those had an ESL endorsement; 18% held a Master's degree in TESOL; and 18% had a TESOL certificate" (p.10), where the remaining 44% held Master's degrees or PhDs in related fields. This finding suggests highly qualified teachers participated in the survey, all of whom have developed expertise that may differ based on their credentialing program. In contrast, the degree to which they were specifically prepared to teach writing was about the same, with about 70% reporting that they received short-term professional development (Fernandez et al., 2017). This suggests that teachers must rely on their formal knowledge from credentialing programs and professional development (both conceptual and procedural) and bridge it with experience of common problems faced in the field.

However, while these studies suggest exposure to a variety of problem contexts produces creative solutions, which is indicative of adaptive expertise, they do not account for the individual or situational facets of expertise that lead to those solutions. That is, how do learners develop specific skills needed to become experts?

Oura and Hatano (2001) posited that expertise is developed through exploration

and reflection. In a study of amateur collegiate pianists who began training at the same age, the authors found that be considered at the expert, the pianists needed to move beyond application of procedural knowledge (i.e., merely playing versus considering the audience). That is, they need to exceed an instrumental understanding of how to play the piano (Brownell, 1935; Skemp, 1987). Expert pianists displayed expression in addition to accurate and smooth notes, which "necessitated their engagement in exploration and reflection" (Hatano & Oura, 2003, p. 27). This demonstrates a deep connection between both procedural and conceptual knowledge applied flexibly by means of two necessary components of learning: exploration and reflection.

Reflection is an integral component of adult learning (Brookfield, 1995). In the process of peer-led professional development, adult numeracy instructors found that reflecting on their experience as math learners contributed to their understanding of experiences their learners have learning math (Appleton, et al., 2017). Additionally, given the opportunity to reflect on findings, ABE practitioners can use research "to support adult learners' progress" (Smith, 2016), where they translate the knowledge they have gained into practical activities and techniques, demonstrating connectedness between procedural knowledge (i.e., how to do certain techniques) and a conceptual understanding of the appropriateness of fit for adult literacy learners.

Most expertise literature in school-based learning does not explain the experiences or conditions that produce flexibility and adaptiveness. Hatano and Inagaki (1992) suggested that constructing mental models through repeated experiences allowed for people to meet new demands and challenges. In order to do this, however, intrinsic motivation to understand the meaning of procedures and why certain outcomes occurred

is required. Fostering this motivation requires a shift in understanding about the way in which knowledge is developed.

Understanding just what expertise is in ABE requires identifying the ways in which practitioners access knowledge development opportunities. According to Patterson (2016), adult educators do not actively apply research to practice, as “they may see research as lacking utility or as overly theoretical” (p. 31), due inexperience translating research findings to their contexts. However, it is this theoretical knowledge that contributed to creative problem-solving in the expertise research (Barnett & Koslowski, 2002). Bridging research and practice through connecting contextualized conceptual knowledge with procedural knowledge may be the key to developing adaptive expertise in ABE.

Research on expertise in school-based learning define some of the key socio-cultural features required for development of expertise in formal settings. For example, Hatano and Oura (2003) suggested reconsidering the means by which knowledge is acquired through the notion of a community of learners (Rogoff, 1994), in which students become experts of chosen domains (Brown, Ash, Rutherford, Nakagawa, Gordon, & Campione, 1993). The ways in which they do this is through cooperative learning methods, such as a jigsaw, where students become experts on a topic and subsequently share what they have learned with other students. This subverts the traditional notion of how knowledge is distributed and, arguably, could be applied to other higher learning environments.

The process of professionalization in ABE is part and parcel of developing adaptive expertise in teachers. In order to understand the type of knowledge developed

(i.e., procedural, conceptual, or both), the quality of that knowledge (i.e., superficial or deep), and the degree to which it is applied to solve novel problems, one must understand how it is delivered in ABE professional learning contexts.

Learning environments.

The way in which content is delivered depends in large part on the learning setting, which includes the three settings identified in Coombs's (1985) typology, including formal, non-formal, and informal settings. Merriam, Caffarella, and Baumgartner (2007) argued that all three categories are of value in adult learning and that there will invariably be overlap between the three types. A fourth site of learning, online learning, has bridged the three types of learning settings, as online learning is available in, for example, formal higher education, non-formal community organizations, and informal online searches (Merriam, Caffarella, & Baumgartner, 2007). These types of learning environments are critical in the delivery of professionalization opportunities that account for the need for professional standards and account for instructors' diverse forms of knowledge.

For the purposes of discussing development of adaptive expertise through the process of professionalization, the alternative non-formal learning and setting subtype proposed by Brennan (1997) is the most salient. These include indigenous forms of learning, specifically those "processes and structures people in particular societies have used to learn about their culture throughout their history" (Graveline, 2005). The processes and structures link specific activities (e.g., dance and storytelling) associated with certain cultures to methods of delivery, techniques, and approaches that instructors

from more formal settings can "integrate into their own ways of thinking" (Merriam, Caffarella, & Baumgartner, 2007, p. 35), reflecting a hybrid learning system.

Based on Merriam, Caffarella, and Baumgartner's (2007) contention that informal learning settings are hybrid and that online learning captures all three learning environments in Coombs's (1985) typology, online learning may be a way in which to incorporate the local and situated knowledge of experience-based experts, adding to potential creative solutions to novel problems in the field. Cognition is de-situated, in this sense (Hatano & Inagaki, 1992), as it can be applied across a variety of contexts. In fact, Merriam, Caffarella, and Baumgartner (2007) argued that "the learning processes and methods used in self-directed and informal learning have been incorporated by some formal and nonformal settings in the way they carry through their instructional programs" (p. 38). Formal credentialing programs for ABE instructors may be offered online. These authors conceded that online learning is almost synonymous with the formal settings in higher education.

However, online learning also occurs in nonformal settings. Of interest to the ABE community are those local community organizations that use the internet "to stimulate citizen participation and…facilitate learning through online activities" (p. 38), similar to the way in which community of learners were formed in the Brown et al. (1993) study. The setting becomes differentiated from the learning processes, as the processes and methods used in informal learning, self-directed in particular, occur in various online searches and participation in discussion boards, blogs, and other forums (Merriam, Caffarella, & Baumgartner, 2007), but may also occur in formal and nonformal settings. What is not clear is the degree to which an online learning

environment (formal and nonformal) can create conditions for development of flexible and innovative problem-solving required for the variety of problems experienced in diverse ABE contexts.

The ABE licensure program at the University of Minnesota is unique, as it offers certification that the teacher of adult students possesses and can apply formal knowledge in adult education settings. However, given what we know from the literature about varied levels of content knowledge and diverse ABE teaching contexts, the third perspective is the most salient to this study, where high quality instructional practices are assured through development content knowledge and instructional methods grounding in theory and research, but application depends on the teaching context.

Summary

This chapter has focused on differing views of the role professionalization in the development of expertise in ABE. In reviewing the literature, several issues emerge.

First, there is established disagreement about the role professionalization plays in development of expertise. On the one hand, teachers learn about best practices. On the other hand, it limits creativity. If it is contextualized, however, teachers may be able to tailor practices to their respective contexts. What is not clear is how professionalization processes, like a credentialing program, can differentiate enough to provide for level of experience (i.e., pre-service versus in-service) and diverse teaching contexts (i.e., drop-in centers, CBOS, and school district sites, level of learners and content taught).

Second, it is unclear what kind expertise ABE teachers develop through professionalization. Many ABE teachers are unlicensed with a variety of prior

educational experience. This suggests that enrollees in the ABE licensure program may have learned methods of teaching adult literacy learners through a myriad of ways. The discussion on adaptive expertise might reveal more about these contexts and the skills and strategies they have yielded. Nebulous skills and strategies yielded by these contexts also suggests that these enrollees may have untapped, non-formally and/or informally derived knowledge and expertise that the formal program may be able to integrate into its instruction, which has been proposed by the discussion on the overlap between learning environments.

Third, given the diversity of control over who hires, delivers services and sets expectations for development, it is yet unknown how expertise develops (is it derived from formal contexts, informal or experiential contexts?) (Collins, 1992; James, 1981; Merriam, Caffarella, & Baumgartner, 2007; Smith, 2005). Examination of participants' knowledge gained from the program (expertise), how they gained it, and its interaction with prior experience and current teaching context (learning environment) may contribute to understanding of how expertise develops for ABE practitioners through the process of professionalization in the state of Minnesota.

The purpose of this study is to investigate how teaching expertise develops through participation in the ABE licensure program as a part of the professionalization process. It takes into consideration past education, work, and life experience as integral to learning how to be an effective teacher in the classroom. The following research questions emerged as a result of gaps in the literature, lack of theory, and uniqueness of the case.

One overarching question and four research questions guiding the study were

developed to elicit the process of becoming an expert for ABE teachers who are or have been enrolled in the ABE licensure program. These questions evolved from a review of the literature, my experiences as a former teacher candidate in the program with ten years of ABE teaching experience, and informal discussions with program faculty and other professionals in the field. Each question has been revised several times, both before and after data collection, resulting in the following primary research question:

How are the individual and situational facets of expertise and their implications for teacher education conveyed (or acquired) through the program coursework?

And the following four main research questions guide the study to address both individual and situational facets of expertise for pre-service and in-service teachers:

- What kind of expertise do inexperienced program participants gain from courses in the licensure program?
- What kind of expertise do experienced program participants gain through the licensure program?
- What program components contribute to the development of expertise in ABE program participants (e.g., online discussions, site visits, microteaching presentations, lesson plans)?
- How do program components contribute to the development of expertise in a variety of teaching settings?

The next chapter describes the methods used to collect and analyze information pertaining to these questions.

Chapter 3: Methodology and Methods

The purpose of this chapter is to describe the research design and the methods used to collect and analyze data collected in this case study. Information collected and analyzed pertained to pre-service and in-service participants' points of view of what expertise is in ABE and how it developed through participation in a licensure program. Identification of formal knowledge gained, educational and work experience, and how these manifest in teaching contexts were considered in the process of data collection and analysis. The participants in this study were past and current enrollees in the ABE licensure program at the University of Minnesota.

Research Design: An Interpretive Case Study

In order to answer the questions, an interpretive case study design was used. Merriam (1998) described the utility of an interpretive case study for a study such as this, as "there is a lack of theory, or if existing theory does not adequately explain the phenomenon" (p. 38). Interpretive case studies also regard the researcher as integral to data collection and analysis (Creswell, 1998; Klein & Myers, 1999; Morgan & Smircich, 1980; Morse, 1994), which is supported by my role as a "passionate participant" (Guba & Lincoln, 1994, p. 115) aiming for a deep understanding of the problem under investigation. Moreover, McDonough and McDonough's (1997) claim that researchers employing an interpretive case study interpret data by forming conceptual categories provided a framework for the research design and the methods used, which will be illustrated in the analysis section of this thesis. The uniqueness of the case, the need to combine existing concepts to support the investigation, my role as a researcher, and the

need to include program participants from different iterations of the program to develop an understanding of multiple program components throughout time suggests that an interpretive design is the most appropriate choice.

While multiple perspectives about program components in a licensure program were an integral part of the study, the interpretive case study methodology is distinct from a phenomenological study. First, this study intends to examine how expertise is developed through specific licensure components, which is different from examining the human experience of expertise as an ABE teacher (Bentz & Shapiro, 1998). While some of the questions ask participants to discuss their experience in the program, the questions do not explicitly ask them about their lived experience of expertise, the phenomenon at hand. On the other hand, participants are asked to describe the utility of specific program components to the development of their teaching which are interpreted via examination of two concepts: adaptive expertise and learning environments.

According to Merriam (1998), interpretive case studies are also "differentiated from straightforward descriptive studies by their complexity, depth, and theoretical orientation" (p. 39). This statement supports the sampling of theories and concepts needed to conduct a case study of a unique licensure program, as a single existing theory does not adequately explain expertise development in an ABE licensure program. Moreover, an interpretive case study is more appropriate than an evaluative case study, as judgment of the program's success is not the goal, rather an understanding of the extent to which certain licensure program components contribute to past and current enrollees' development of ABE teaching expertise, how formal, nonformal and/or informal knowledge are integrated in a licensure program, and how this contributes to the

development of expertise in the field.

This is furthered by the theoretical underpinnings of the case study approach, which reside in the constructivist paradigm. Ontologically speaking, constructivists purport that reality is situated and local and there is not a reality out there that is separate from human beings. Truth is thereby relativistic, or conceptions of truth are relative to the individual perceptions of it. The qualitative health researcher Annells (1996) has indicated that "reality exists only as multiple mental constructions" (p. 386). Therefore, the interpretive case study approach recognizes the criticality of enrollees' truth and knowledge about how specific licensure program components may develop expertise.

Similarly, epistemologically speaking, constructivism views knowledge as created by human beings, in which the knower is placed into the known, contrary to the aims of traditional science in positivist and post-positivist traditions. As such, "the knower is subjectively and interactively linked in relationship to what can be known" (Annells, 1996, p. 385), which is shown by past and current enrollees' discussion of a Minnesota-based licensure program and its components in the interviews of this study.

The main research question and four sub-questions may be answered by way of an interpretive case study because they address Yin's (1994) characteristics of case study research questions. In addition to determining what expertise is in ABE, my questions seek to address how it develops, and multiple perspectives were derived from voluntary interviews rather than through manipulation of behavior, which is a current and pervasive issue given the rapid change of the field.

As such, the overall intent of the case study is interpretive. The discussions about program components in interviews were used to interpret the issue of formal knowledge

bridging with the experiential to develop expertise in an online program as well as subsequent applications of that knowledge in the field.

Unit of Analysis

Understanding what the case is in this study is critical. Miles and Huberman (1994) defined a case as bounded by definition and context. For the purposes of this study, the case is the ABE licensure program defined by the university delivering it, which is in the context of in-person and distance learning. In other words, the case under investigation is the in-person and online-delivered ABE licensure program at the University of Minnesota, the sole form of credentialing in adult basic education in the state of Minnesota at the time of this study. Given the fact that this is one of the only credentialing systems in the United States, only one case was chosen. Additionally, the program was chosen as the case because all participants were subject to the same requirements for completion; albeit at different times throughout the professionalization of the field.

Adherence of Research Design to Professional Standards

While Merriam (1998) and McDonough and McDonough's (1997) research design and Yin's (1994) criteria aligned my research questions to the case study design, Miles and Huberman (1994) in conjunction with Merriam (1998) and Stake (1995) informed the majority of the data collection and analysis methods. The authors described methods of instrumentation, sampling, managing data, analysis, and ways in which to construct within-case displays in a way that facilitates comparison and contrast between

program participants.

Data Collection Procedures

After securing informed consent to participate in the study, data were collected from the following sources: a) semi-structured interviews, b) program documents, c) participant documents, and d) peer reviews of emerging themes. While the first yielded the most salient information, the latter three served as a source of validity (Sandelowski, 1995). All questions developed before, during, and after data collection were determined by Strauss, Schatzman, Bucher, and Sabshin's (1981) categories for questions. Through a comparison of interview data with program and participant documents highlighting standards of effective practice for teachers of ABE, it was possible to see if a subset of the interview questions addressed what they intended to address. Peer checking (Merriam, 1998) was also done through informal conversation with colleagues to check feasibility of content as it emerged.

Interview: what I did.

An interview protocol listing questions was created for semi-structured interviews with participants. A semi-structured as opposed to an unstructured approach was the most appropriate for this study, as the processes of data collection and analysis is simplified (Miles & Huberman, 1994). Miles and Huberman (1994) also warned that unstructured and pure, inductive approaches can yield a lot of data that is time consuming to analyze. Since the approximate amount of time to complete the study was nine months, it was imperative to reduce the amount of time spent on data collection through interviews and simultaneous analysis (Miles & Huberman, 1994). It should be noted,

however, that the semi-structured nature of the interview shifted to unstructured depending on what the participant had to say. Interviews were anywhere from 30 to 45 minutes.

The interview questions fall under four categories, namely a) the participant's ABE professional journey (including prior experience, content taught, and learner demographics); b) teacher preparation through course topics; c) application of knowledge gained from teacher preparation and d) ongoing professional development needs. While the participant dictated the direction of the interview, each of the categories was addressed with every participant. Multiple questions were included in the list, including main interview questions, probes, and follow-up questions, where the main interview questions changed after the pilot interview as it was learned "what to ask and to whom to ask it" (Rubin & Rubin, 1995). The probes were either for clarification or explanation on certain topics and were prepared prior to the interview. In contrast, the follow-up questions were added throughout the process of interviewing the ten participants to gain depth and description of emerging themes.

As stated previously, the overarching question was designed to delineate the aspects of expertise by way of participant descriptions of licensure program components utility:

How are the individual and situational facets of expertise and their implications for teacher education conveyed (or acquired) through the program coursework?

This question reflects study methodology in that it aims to contribute to

understanding of the *process* by which expertise is developed in a system of professionalization (Merriam, 1988) as opposed to the outcome which is already known (i.e., expertise). Moreover, it guides analysis in the formation of exemplars of the means by which expertise is developed (i.e., key aspects of the licensure program).

The overarching question was broken down into four main questions (Hancock & Algozzine, 2011), including:

- What kind of expertise do inexperienced program participants gain from courses in the licensure program?
- What kind of expertise do experienced program participants gain through the licensure program?
- What program components contribute to the development of expertise in ABE program participants (e.g., online discussions, site visits, microteaching presentations, lesson plans)?
- How do program components contribute to the development of expertise in a variety of teaching settings?

Based on these four guiding questions, the following interview questions were devised:

- Tell me how you came to the field of ABE.
- Tell me about your experience as a teacher.
- Describe any challenges you have had as a teacher in the classroom.
- What resources were available to address these challenges?
- What components would your ideal professional development contain?

With regard to the first question, the story of how the participant came to the field illustrates initial knowledge and expertise the participant developed before program

entry. The second question links prior practice with the decision to seek training through the licensure program, which highlights the extent to which teacher competencies and standards guided their professionalization process. For the third and fourth questions, the effectiveness of the professionalization process comes into focus as the participant discusses the ways in which the program has contributed to their ability to problem-solve. Finally, the fifth question reveals the extent to which the program participation has integrated them into a supported, community of practitioners.

Each main interview question explores facets of how expertise develops in an ABE licensure program through a discussion of the process of gaining expertise through participation in key program components and in the field upon completion of the program. Through these questions, an emic (insider) view of this process derived through ABE professionalization was sought (Guba & Lincoln, 1994). Furthermore, the insider views of the participants are social constructions of expertise through the lens of participant description licensure program delivery and utility of specific components, to be "elicited and refined only between and among investigator and respondents" (Guba & Lincoln, 1994, p. 207), reflecting a dialectical interchange.

Probing questions helped guide the interview by providing more detail and description and clarifying previously made points (Rubin & Rubin, 1995). Questions shifted based on whether the participant was pre-service or in-service and whether or not they had extended teaching experience. For example, I would rephrase a question to a pre-service teacher to ask about experience as a volunteer as opposed to teaching experience.

Not all probes were addressed as participants often covered the topic without

needing the probe. However, they did serve as a "signal [to] the interviewees that [the researcher] wants longer and more detailed answers, specific examples, or evidence" (Rubin & Rubin, 1995). This was needed for the telephone interviews, as the literature indicated that telephone interviews tend to be shorter than face-to-face interactions (Wilson, Roe, & Wright, 1998). Moreover, it was impossible to detect body language or increasing interest in one question over another over the phone. As such, having prepared probes ensured that all topics were covered (Glogowska, Young, & Lockyer, 2011).

Follow-up questions were developed to explore emerging themes throughout the process of interviewing (Rubin & Rubin, 1995). After a cluster of interviews, it was possible to see certain themes emerging, so at least one follow-up question was added under each main question. They were not all added at the same time; rather, they cascaded as they opened up "new lines of inquiry that [the researcher] wanted to follow up on in turn" (Rubin & Rubin, 1995, p. 151). Furthermore, each follow-up question was not asked of each interviewee as they may have addressed it in discussion of a different question or it was not applicable to their context.

All interview questions reflect Strauss, Schatzman, Bucher, and Sabshin's (1981) categories for good interview questions, including hypothetical, devil's advocate, interpretive, and ideal position. Participants were asked a hypothetical question if their context varied from typical ABE settings. For example, if a participant noted an abundance of resources at their site, they were asked "if resource deplete, how would you make use of resources? Participants were asked a devil's advocate question to challenge them to consider another viewpoint. For example, if the participant declared low

expectations upon entry into the program, they were asked what they actually did take from it. An interpretive question was asked if the participant provided a partial interpretation of their experience. For example, if the participant was discussing the ability to address challenges in their organization, but then referred to their role as ABE teacher in the field as a whole, they were asked about challenges they have experienced as a teacher as a part of a larger institution. Finally, participants were asked ideal position questions to direct their attention to ideal components that they believe would develop expertise. This is reflected in the question asking about their ideal professional development. See Table 3.1 below for sample interview questions.

Table 3.1 Sample Interview Questions

Type of Question	Sample Interview Question
Hypothetical	If you were resource deplete, how would you make use of resources?
Devil's Advocate	What did you actually take away from the program?
Interpretive	What challenges have you experienced as teachers of learners in a larger institution?
Ideal Position	What components would your ideal professional development contain?

Interviews-where I did them.

Interviews were held one of three places, namely a) an open space on the University of Minnesota--Twin Cities campus; b) a local cafe, or c) via telephone using the Smart Voice Recorder application on speaker phone. These three options were

selected to accommodate those with time or travel needs; however, the majority of interviews were conducted via telephone.

A few methodological considerations for these interviews included: a) advanced planning for the interview from both parties; b) increased correspondence between interviewer and interviewee to build rapport; c) explanation of the technical aspects of recording (i.e., stating explicitly that they were being recorded, that it was a necessity, and that their identity would be kept confidential); d) abbreviated field notes were recorded during the interview; and e) impressions were recorded after the interview. All of these considerations were necessary to the carry out the purpose of the study and ensure quality data (Glogowska et al., 2011).

Furthermore, this method of data collection forced the objectives of the interview to be made clear for the participant, which focused the interview. All interviews were recorded using the aforementioned application, saved, and backed up as secure files via a private Google Drive folder. Where a follow-up with the interviewee was required, close attention and respect of the participant scheduling was imperative due to the time constraints of responsibilities of current students and working adults. An attempt for positive closure was made at the end of every interview, for example, by offering the participant if they would like to know the results of the study or participate in member checking. See Appendix A for the original and revised interview protocol.

Sampling of participants.

Ten participants were selected for interview using a stratified purposeful sampling method in which “the researcher, rather than initial informants, [selected] the informants

according to research needs" (Morse, 1989, p. 184), including the need to highlight groupings of kinds of ABE licensure program participants and promote comparison between them. This means that participants were selected based on an even sampling of several criteria, including (a) when they participated in the program, (b) degree of experience with an online learning format, (c) whether they were pre-service or in-service, (d) prior education/work experience, e) professional status, (f) the degree to which they teach a variety of topics and learners in their respective teaching contexts, and (g) the organization where they currently teach. Some of this information was known a priori and some was collected during the interview. If insufficient diversity was determined, secondary participants were chosen.

The table below illustrates these criteria across participants. The year 2017 indicates that they are completing the program, though it does not indicate when they entered, if they took a leave of absence, etc.

Table 3.2 Criteria for Selection Across Participants

Name	**Year Completed/ Participated**	**Experience Online (none/some/a lot**	**Master's, License, or Both**	**In-service or Pre-service**	**Prior Education/ Work Experience**	**Professional Status**	**Variety in content and learners**	**Hiring Organization**
Erin	2017	Some	Both	pre-service	Bachelor's in linguistics and Bachelor's in American Sign Language	Volunteer/ Tutor	Deaf/HH immigrants, ESL	non-profit, CBO
Kate	2017	a lot	Both	in-servic	Peace Corps	Teacher	High beginnin	CBO

				e	English teacher, Master's in adult education		g ESL/GED	
Karen	2011	a lot	Both	in-service	M.Ed in education, TEFL certificate, ABE licensure	Teacher	ESL, pre-literacy	CBO
Doug	2013	a lot	Both	pre-service	Master's in nonprofit and public administration	Teacher/ Administrator	GED/Testing	school district site
Kim	2017	a lot	Both	pre-service	Bachelor's degree in English, social justice, and public health	Volunteer/ Tutor	ESL, pre-literacy	CBO
Mary	2017	Some	License	pre-service	K-12 licensure in ESL	Teacher	ESL, college prep	school district site
Roger	2017	None	License	in-service	Half a year towards a Master's in Spanish Literature, License to teach Spanish language	Teacher	GED	drop in center through school district site
Joy	2017	Some	License	in-service	Bachelor's and license in elementary education	Teacher/ Administrator	GED/adult career pathways	school district satellite site

					and minor in math.			
Sharon	2005	None	License	in-service	Bachelor’s in Education and Studio Art, TEFL certificate, ABE license	Teacher	Advanced ESL, workplace ESL	CBO
Helen	2000	n/a (too early to for courses completely online)	Both	pre-service, but extensive volunteer experience	Bachelor’s-International Relations Master’s in adult education /ABE license	Teacher/ Administrator	ESL all levels, Pre-GED, GED reading and writing, adult career pathways	school district site

These selection criteria provide sufficient variety of experience to ensure appropriateness and adequacy. Moreover, this variety ensured validity and reliability, as there were a few exceptions among participants and secondary participants were selected after the first three interviews commenced (Morse, 1989). It should be noted that the participants were all known to me prior to selection from a list provided by the licensure program coordinator. However, participants were selected based on the criteria listed above as opposed to their availability for participation, as in an opportunistic sample.

Role of the researcher.

It should also be noted that I am among the target population. A past enrollee, current ABE teacher, professional development coordinator, and instructor in the

licensure program, I have a sustained interest in the findings of this study as it directly impacts my career. However, in order to control for the influence of potential biases, assumptions and beliefs, a pilot interview was completed with me as a participant. This interview had the intention of identifying those biases, assumptions, and beliefs in order to bracket them (Husserl, 1911/80; van Manen, 2007) during interviews and analysis. While there was a dialectical interchange between interviewees and the interviewer (Guba & Lincoln, 1994) in the construction of expertise as a product of professionalization, the interviewee guided the interview, as was the case with my bracketing process. Researcher identity memos were recorded to "examine goals, experiences, assumptions, feelings, and values as they relate to [the] research" (Maxwell, 2005) in order to parse out any conflicts my identity and experiences might have with the outcome of this research. A third party with knowledge of the field was chosen to conduct the interview such that the content of the questions would not impede the interview process.

Program documents.

Collecting information through a variety of methods was important to reduce the limitation of data collected solely from interviews (Maxwell, 2005). Document analysis was used as a way to check participant perspectives, reflections, and insights against documented standards of effective practice for teachers of ABE. Documents that were collected included the following:

- Matrices of Standards of Effective Practice (SEPs)
- ABE Content Standards

- Licensure program course syllabi
- Assignment descriptions
- Completed Assessments

Authenticity and accuracy of these documents was verified as the provenance was the Office of Teaching Education at the University of Minnesota.

The criterion of relevance for the last three documents in the list was met if the participant alluded to the course in the interview. These documents were chosen in order to generate rich data grounded in professional context (Maxwell, 2005). Triangulation was imperative to not only expounding upon the understanding of the data, but solidifying the conclusions drawn from analysis.

Information about standards mandated in a credentialing programs was collected. In particular, standards that address both content and how content should be delivered was retrieved. Syllabi and assignment descriptions reflect assessments of these standards. Completed assessments illustrate how the participant demonstrated understanding of the standard.

Participant documents.

I also included archives of past work completed, gained with permission, in courses I had access to as an instructor in the licensure program. Those materials that were retrievable were for participants in the program within the past five years. While the materials were difficult to secure for all participants, what was retrievable illustrated integration of standards of effective practice in the field.

Data Management and Analysis

Data management.

I followed Miles and Huberman's (1994) recommendation of Levine's (1885) five principles for data management, including: a) formatting, b) cross-referral, c) indexing, d) abstracting, and e) pagination.

In terms of formatting, I transcribed my interview recordings. Using Google Docs, all interviews were transcribed verbatim, as some pauses and incomplete thoughts did not impede meaning (Miles & Huberman, 1994). The transcripts were sorted into folders denoting characteristics of the ABE program participant (e.g., experienced, not experienced, early program entry, late program entry). Hard copies were also sorted later for coding purposes.

Cross-referral was implemented by way of inserting links to the Google Doc of another transcript. If participants worked in similar settings, for example, links to other transcripts meeting the same criteria were provided.

In the process of indexing, common words or phrases were identified as important in interview transcripts and relevant program documents and codes were defined. This was done through identification of topics, clustering of those topics, and creating codes. These were handwritten into the margins of the transcript and documents where applicable and connected to related text. ATLAS.ti software was used to locate all occurrences and record frequencies for easy location later.

Summary forms were created for interviews and documents to illustrate coded themes. Documents were abstracted such that summaries of longer text would be noted in

the summary form. Letters and numbers were also included in the summary to locate specific material in the interview transcripts or document.

The following is an example from an interview summary form with coded themes:

Participant	Location	Participant's Comments	Question	Code
Karen	P3-3.2	So much of the stuff that we talked about in class was theoretical and I think it really transformed the way I think about who adult learners are and what we're doing in adult basic education.	How do you think you've drawn upon program training while in the field?	Theory

Notes on content of program documents were organized in a similar way. The following is an example from a document summary form:

Document Name	Location of Content	Salient Information	Code
ABE Content Standards	Section 2, 3B	A teacher of adult education must understand adult learning theories	Theory

Data analysis: from codes to themes.

While codes were formed during data management, additional analysis of interview and document content was required. To move to the next level of analysis, "themes that capture some recurring pattern" (Merriam, 1998, p.179) across most the data needed to be developed. At an additional level, I attempted to present my findings descriptively to facilitate generalizations to be made by readers. These descriptions make the findings more relatable. In order to do this, the latter two of Stake's (1995) four

phases of data analysis were used. The table below illustrates the four phases as they apply to my study. Additional detail about the first two phases follows, with particular attention to categorical aggregation.

Table 3.2: Phases of Data Analysis (Stake, 1995)

Phase 1- Description	Generating a basic description knowledge gained, elements of the licensure program contributed to the development of expertise, and its utility in the field.
Phase 2- Categorical Aggregation	Categorization of data into exemplars of knowledge gained from the program, program components, and settings where application occurs
Phase 3- Establishing Patterns	Collapsing categories to reflect patterns that occur consistently across the data. Providing a name for the pattern and then writing a description of the theme that emerges.
Phase 4- Naturalistic Generalizations	Analyzing the findings and noting which kinds of knowledge and aspects of the licensure program link to, or bridge to the execution of adaptive expertise in the field.

Adapted from Miles and Huberman (1994), this method of data analysis followed Stake's (1995) phases while implementing my data management system, I got a sense for the whole by reading through all the data and all others as they were collected for a microanalysis (Strauss & Corbin, 1990). Notes of areas of content that were of interest to the research purpose were made. Transcripts were grouped according to classification of the ABE program participant (i.e., experienced/early program participant, inexperienced/late program participant, and experienced/late program participant). No inexperienced/early entry participants were in this study,

When three interviews were conducted, careful attention was paid to transitions between topics. Topics were identified within each transcript, but the substance of the statements were left for later analysis. Reference to the main research questions was

made for organizational purposes of topics, including the titles a) knowledge, b) program components, and c) settings. These topics were written into interview and document summaries. This aligned with Stake's (1995) first phase.

Continuing the first phase through all interviews, the next phase began after six interviews. A list of all topics was formed with one topic per organizational title. Connections were made among similar topic descriptions by drawing lines between topic descriptions to form a diagram. Using this diagram, topic clusters were formed, named, and abbreviated into codes, reflecting Stake's (1995) second phase. Codes were written into the summary form. These were the topic clusters formed for each participant classification and their corresponding codes:

Table 3.3 Codes by Program Participant Group

Participant Classification	**Knowledge**	**Program Components**	**Settings**
Experienced/early	• Theory • Best-practices for adult learning • Deeper understanding of own site	• Foundations in Adult Learning • Demos • Models • Human Resource Development	• formal instructional (classroom) • non-formal (workplace settings)
Inexperienced/late	• Best-practices for adult learning • Best practices for teaching literacy • Deeper	• online discussions • lesson plans • Methods courses • site visits • Models • Intro courses • Learning	• formal instructional • non-formal (one-to-one tutoring)

	understanding of ABE community	Management System (LMS): Moodle	
Experienced/late	• Best-practices for adult learning • Deeper understanding of own site • Deeper understanding of ABE community • Creative Approaches	• online discussions • Methods courses • Standards • site visits • LMS: Moodle	• formal instructional • non-formal (online, drop-in center, bank basement, church basement)

At this point, the organizational system identified codes as categories. The three organizational titles were combined and connected codes were included to illustrate a pattern across data. Then, two lists were formed: a) high frequency categories and b) unique categories. Subcategories were noted, making it necessary to collapse some categories into others. I wanted to include high frequency and unique categories in the findings to illustrate patterns across data as well as alternative options to meet the needs of both inexperienced and experienced teachers entering a credentialing program. A total of five categories were created for ease of management. All of this coincides with Stake's (1995) third phase of analysis. The following categories were formed:

Table 3.4 Categories

High Frequency	Unique
Foundations in adult teaching and learning	Modeling, seeing and doing

Research to inform practice	Managing Systems within the ABE community
Engagement with the ABE community	

Finally, the content of statements was considered in the process of analysis. Content was summarized for each category, specifically with regard to a) similarities in content; b) uniqueness in content; c) contradictions in content; and d) missing information to be addressed by follow-up questions or, if outside the scope of the study, left for recommendations for further research. Themes were formed to illustrate how expertise develops through participation in the professionalization process, such that readers can form generalizations about content. The following themes were formed and key points were placed beneath them to illustrate the central meaning.

Table 3.5 Themes

Themes	Key Point
Expertise through Engagement in a Community of Practice	Active Participation in Online Discussions and Engagement in Field Components
Expertise through Understanding the Foundations of Practice	Standards Versus Theory
Expertise through Engagement in Research-Based Practices	Tried and True Versus New and Innovative Approaches
Expertise through Modeling as a Teaching Strategy	Seeing Versus Doing
Expertise through Knowledge of Managing Systems	Navigating Versus Combating

Finding points within each theme.

When listing themes in the next section, I labeled them according to the table

above, but also note when there are differences between licensure program participants. Degree of experience and when they enrolled in the program illustrate recent emphasis of standards and their importance to the development of expertise in the participant. I illustrate this in three ways: a) I presented themes describing similarities between all participants in all settings followed by those that illustrate key differences, b) I reported findings for inexperienced teachers first, following by experienced teachers (with the exception of the foundations theme which is separated by time of entry), and c) I introduced each theme with the corresponding key point. This structure was used consistently throughout the entire report of findings.

Summary

The purpose of this chapter was to describe what, how, and why I chose the research design and methods to gather and analyze data. An interpretive case study methodology was chosen to gain insight into how specific program components contribute to expertise development among diverse program participants. Data were collected through semi-structured interviews, program documents, and participant assignments. Discussions with peers checked data throughout the interview process as themes emerged.

Themes that emerged map directly to the main research question. The main research question guiding the study is as follows:

How are the individual and situational facets of expertise and their implications for teacher education conveyed (or acquired) through the program coursework?

Each theme expressed either an individual or a situational aspect of expertise gained through program coursework (e.g., having models versus actively doing something), some of which were shared by all participants, while others were unique to the time of program entry and level of experience of the participant.

Similarities and differences between program participants (i.e, pre-service versus in-service, time of program entry) come into focus within each theme as well. The key point noted for each theme illustrates the comparison. The following two questions set up these comparisons:

- What kind of expertise do inexperienced program participants gain from courses in the licensure program?
- What kind of expertise do experienced program participants gain through the licensure program?

While program participants expressed agreement on knowledge that is developed through certain components, they differed in many skills based on when they entered the program (aligning with the state of the field regarding professionalization) as well as the level of practical experience in the field. Separating the report of results using the key points accounts for these similarities and differences among participants and their potential impact on quality teacher education.

Themes also account for how a variety of program components may develop expertise among teachers in diverse settings. The content encountered (e.g., research-based practices) through community-building activities (e.g., discussions) was noted as critical to performance in the field depending on where he or she worked. The following

questions address program components in particular:

- What program components contribute to the development of expertise in ABE program participants (e.g., online discussions, site visits, microteaching presentations, lesson plans)?
- How do program components contribute to the development of expertise in a variety of teaching settings?

The following section presents the findings of this study organized by the research questions and correlating themes discussed at the end of this chapter.

Chapter 4: Findings

Introduction

This chapter discusses individual and situational aspects of expertise developed through specific components of the ABE licensure programs. First, expertise will be discussed as developed through components with the same purpose. Next, key differences among participants' experience in applying knowledge gained from the program versus the field will be presented to account for changes in standards of the profession (i.e., content standards) within the past five years. Finally, differences in expertise exhibited by participants will be discussed in relation to their respective teaching settings.

Through enrollment in a credentialing program, participants identified several facets of the program that were integral to their abilities to perform on the job. Key differences existed between experienced and inexperienced teachers, those who entered the program at different times (i.e., early versus late entry), and where the participant works (i.e., a school district site versus a CBO). For that reason, this chapter is organized around key program components common to all program participants, those that differed among participants level of experience, those that differed based on time of entry, and those that differed based on the ABE teaching setting.

A total of five themes capture how past and current participants in an ABE licensure program develop expertise through the process of professionalization, including a) expertise through engagement in a community of practice, b) expertise through understanding the foundations of practice, c) expertise through engagement in research-

based practices, d) expertise through modeling as a teaching strategy, and e) expertise through knowledge of managing systems.

In the process of detailing each theme, it will be important to distinguish between participants with significant (1+ years) teaching experience prior to enrollment from those with less experience, to clarify when individuals participated in the program (which ranged from enrollment in the most recent iterations to enrollment more than five years ago), and how participants demonstrate expertise across settings (i.e., school-districts, CBOs, drop-in centers). Making these distinctions will help to highlight aspects of the ABE program that contributed to the development of expertise. Thus, this chapter's themes are organized under the following three headings: a) Components of Quality Teacher Education for all Participants, b) Shifting the Focus: Differences between Participants' Knowledge Base Based on Time of Program Entry, and c) Understanding Teaching Context as a Part of Expertise.

Components of Quality Teacher Education for All Participants

Only components that involved engagement with other ABE colleagues were mentioned as critical to development of expertise among participants. It should be noted that many participants in early iterations of the program did not have access to the online component, but those who did within the last five years have found it beneficial given the focus on new standards.

Expertise through Engagement in a Community of Practice: Active Participation in Online Discussions and Engagement in Field Components

Inexperienced and experienced participants enrolled in later iterations of the program indicated that participation in the online discussions and field components helped them develop interpersonal relationships based on a common goal of understanding teaching challenges in a typical ABE classroom. This was a facilitator of effective learning communities (Grossman, Wineburg, & Woolworth, 2000; Wenger, McDermott, and Snyder, 2002). Interaction with colleagues fostered deeper thinking about what practitioners actually face, solidified content that they were learning, revealed potential solutions to a myriad of problems, and validated their experiences. A community of ABE practitioners forms as a result of this interaction.

Active participation in online discussions.

Participants referred to the ongoing scenario-based online discussions as a chance to connect with others in the field about gaps in knowledge impacting the efficacy of their instruction. Erin, who had one year of volunteer experience prior to enrollment in a recent iteration of the program, relayed how discussions of hypothetical situations ABE teachers might encounter highlighted best practices for differentiation of instruction. In an example from an online methods of teaching adult literacy course, Erin describes the benefits of discussing with peers adjustments they could make to lesson plans, providing possible solutions to common problems that they may encounter, such as in this scenario:

Erin: "Just certain issues that we talked about, like in the online discussion. I don't

know why this stuck with me, but like even 15 students, 2 or 3 twiddling their thumbs beyond what everyone is doing, 2 or 3 completely in the reeds, and a big chunk sort or right where you're at and you know, how do you navigate that?"

Erin went on to explain a potential solution that emerged for her - pairing students, with an awareness that respects cultural boundaries:

Erin: "...for those twiddling their thumbs, can you partner up, and can you spend your time teaching in a way, partnering up people who were struggling with the whole male/female barrier and who is allowed to help who and there were all these nuances that were very much real."

Cultural nuances that emerge in the classroom interactions were frequent topics of discussion, according to participants. Roger, an experienced teacher in the most recent iteration of the program discussed how interaction with colleagues from around the state validated what he was seeing in his own class as well as unearthed ideas about differentiation to meet needs beyond the academic (i.e., personal, medical, and social) that he may not have thought about before and plans to integrate in his classroom with older adolescents, of the age that many ABE students are at the low end of the age spectrum. The approaches he referred to came from the literature provided in the course as well as from his colleagues in online discussions:

Roger: "I would take notes on the side that I hoped I could use for my Spanish class. That is indeed where I am going to be able to use all the different approaches we went

over and that people brought in class…There's a great deal of spillover in class dealing with students with challenges, not just academic, but often social, personal, medical, mental health stuff...There are many of them who are not ready to take advantage of their academic setting."

Roger also noted that while there was a "tech challenge with reading online resources," he felt he learned a lot from discussions because he did not have time to speak to his peers who were also part timers who he "passed in the hall."

Documentation that identification of common classroom issues, including diversity of skill and student challenges can be found in the Standards of Effective Practice (SEP) matrix mandated by MNBOT. According to standard 2, subpart 3, teachers must be able to "understand how students learn and develop and must provide learning opportunities that support a student's intellectual, social, and personal development" (PERCA, 2017, p. 6). Both the novice and experienced teacher cited discussion about course content (reading-based and scenario-based that tapped into prior knowledge) with colleagues as elucidating common problems ABE students encounter when learning; however, the more experienced teacher found validation in his experience, followed by extension of what he knows to be effective.

Erin discussed a portion of this standard, in the identification of intellectual differences and questioning different approaches. As such, she was on her way to fully learning standard 3B, under subpart 3, that a teacher must "understand that a student's physical, social, moral, and cognitive development influence learning and know how to address these factors when making instructional decisions" (PERCA, 2017, p. 6) through

her questions about student grouping. Roger, on the other hand, extends this understanding as it applies to readiness to learn, as in standard 3C, under subpart 3, in which a teacher must “identify levels of readiness in learning and…how development in any one domain may affect performance in others” (PERCA, 2017. p. 6).

While some teachers discussed learning methods and their classroom applications through online learning, others described online learning as a way to expand awareness of issues facing teachers and learners in ABE and develop a community of practice on an emotional and professional level in the process. Doug, an inexperienced teacher enrolled recently, explained that his online introductory classes introduced him to issues facing teachers and student in various programs around state as well as the sense of community, or solidarity, he derived from it. In the following statement, Doug describes what he learned from online courses that introduced him to learner and teacher demographics and types of literacy programming:

Doug: “I think knowing that the field of adult education is kind of marginalized...teachers and staff are marginalized, maybe that in some kind of way, maybe in solidarity with other teachers and learners who come from marginalized backgrounds or treated unfairly, maybe that has helped a bit. I think that the program gives a good overview of what adult education is in terms of programs, planning and design.”

Joy, an experienced teacher enrolled recently echoed this sentiment by connecting issues discussed with others in online environment to what she was experiencing in rural Minnesota. In the statement below, Joy explained how an online discussion facilitated

understanding of common programmatic issues experienced in both non-formal settings in rural Minnesota and formal instructional settings in the urban metro area:

Joy: "I think the digital divide idea and technology, I think it was refreshing to hear the rural concerns but also to recognize that metro area has the same problems, just from a different vantage point. Instead of being the Northern whiner, I was like wow, we have this issue, but we don't have that issue."

Joy went on to explain that online discussion facilitated her understanding that the non-academic needs of learners, in particular, is a step beyond learning about basic approaches to teaching literacy:

Joy: So it was eye opening to realize the technology, the digital divide, the learners, the all-encompassing needs of learners that are not academic. You can learn to teach GED math. You can create worksheets. You can have conversations. You can go to [the Minnesota Numeracy Initiative]. The non-academic needs, that is something I was hearing in and even in the [discussions] in our classes, you can hear people coming from different vantage points and even different professions. I was surprised to hear from people in the class that are coming from different fields just coming into adult education."

Joy not only identified a connection between disparate teaching contexts, but different fields. While she did not allude to solutions to common challenges addressed in class, as

an experienced teacher in the newest iteration of the program, online discussion was a way to draw her attention to common non-academic issues faced by ABE students across the state.

Engagement in field components.

For those new to the program and new to the field, staple components of the licensure program, including, observations and interviews of teachers, site visits, field hour requirements and field experiences contributed to their understanding of a dynamic teaching environment and expanded their awareness of what is happening in ABE. Erin recounted how when she observed a teacher, her understanding of the need to adapt to a changing environment increased:

Erin: "I went out to observe [a teacher] and....she said the same thing and this is my lesson plan. It's a little scratched out note and she said this is what works. Whenever I sit down and tediously write out everything, I say forget it, it's not going to work that way. Part of the skill and what you end up with from the experience is you learn how to do things on the fly with skill and do them well and do what works instead of having a preconceived way about what you're supposed to be doing."

While Erin learned about lesson planning "on the fly" from a program component, Kim, the most inexperienced of the participants, described part of her hour completion as an example of direct application of formal knowledge gained from the methods of teaching adult literacy. She describes the ability to learn and apply in her

experience as a novice in the program:

Kim: "I came in and sometimes people, volunteers are out, so we kind of shift around who teachers what. I was prepped to teach a pre-beginning in the intermediate classroom. I'm pretty flexible and they had the curriculum, but I just didn't feel it was hitting home with students, probably because I hadn't prepared for it. But I had just finished doing the lesson plan for the intermediate class or the advanced class on discussion and I was like oh, I can use this. So I just pulled concepts from the plan I had made for the class and it was cool."

Both Erin and Kim described how involvement in the field while in the program facilitated understanding of how teachers must adapt. Kim, in particular, linked formal knowledge from the methods course to her involvement in the field, while Erin observed and received confirmation of models of best practices in her view. As relative novices, both Erin and Kim were able to take in information, reflect and, in the case of Kim, apply effective practices.

For others, however, there was lack of connection to the field despite these program components. Instead, teachers, like Doug, viewed his volunteer experience as secondary to teaching experience. For example, he said, "I guess I was not fully immersed in the field, I was volunteering. I wonder what takeaways I would have had had I been in the field while I was in the licensure program." Some inexperienced and experienced teachers, both from recent and past program offerings, also noted past volunteer experience they completed before or while in the program as "just volunteer

work, or they "[were] not actually teaching," "just tutoring," or "being an assistant."

For experienced teachers who completed the program in the past, program components emphasizing involvement with the field and connecting it with research on methods were missing from their experience, yielding mixed opinions about how the program contributed to the development of their expertise. Involvement with the field was at a minimum for some participants. For Helen, the participant who completed the initial licensure program in its first iteration, classroom observations were done of her own volition to supplement her learning:

Helen: "I'm going to be honest and I don't think I got as much out of it as I thought, but like any situation, I try to make the best of it. I did supplemental reading and class observation. Because I am, I have that growth mindset, and I'm persistent. I always think I can do something better or I can learn something more."

Helen sought out opportunities to learn about promising practices for teaching adults through supplemental class observation that was not a part of the program at the time. Despite this, her "growth mindset" contributed to her individual development of expertise.

Erin, Kim, and Helen needed to interact with the ABE community in some regard, establish relationships, and address gaps in their knowledge. The SEPs for teachers in the state of Minnesota require teachers to do just this through standard 10, subpart 11, in which teachers must "communicate and interact with...families, school colleagues, and the community to support student learning and well-being" (PERCA, 2017, p. 29). These

three participants exhibited standard 11G, in which teachers “collaborate with other professionals to improve the overall learning environment for students” (PERCA, 2017. p. 29). Moreover, all four participants addressed these standards while in the learning environments outside of the university.

Shifting the Focus: Differences between Participants’ Knowledge Base Based on Time of Program Entry and Level of Experience

Key differences between participants emerged in discussions about the foundation of their practice. Foundation refers to the underpinnings of the participants’ practice. Given the recent shift to standards, those teachers enrolled in the recent iterations of the program found that program components emphasizing the standards to be the most helpful. On the other hand, those attending earlier offerings received more instruction in adult education theory that, with a lot reflection, was useful for improvement at the level of the organization.

A similar distinction was present for experienced and inexperienced teachers regarding research-based methods. Inexperienced teachers expressed a desire to gain a toolkit of best practices, whereas experienced teachers were interested in expanding their repertoire of skills. The novice/experienced teacher dichotomy was present in these findings.

Participants were also divided about best practices contributing to expertise with regard to modeling as a teaching method. The experience was much more receptive for recent participants engaged in online learning, whereas early participants had access to

faculty able to provide in-person models. While video technology has helped bridge this gap, recent program participants indicated that they are missing the feedback on their own teaching. Here, the distinction is between participants' time of entry.

Expertise through Understanding the Foundations of Practice: Standards Versus Theory

Experienced teachers enrolled in recent iterations of the programs emphasized standards as the foundation of much of what they do in the field and as a key component of what they took from the online methods of teaching adult literacy series. This makes sense given the recent shift in the field toward standards implementation. However, experienced teachers in earlier iterations cited in-person perspectives of adult learning and general adult teaching strategies courses as the key components influencing the materials and approaches they choose for teaching.

Standards as foundation.

Experienced teachers in a recent iteration of the program cited standards as critical to their instruction for a single reason: they were addressing them in the field close to the time they were learning about them in Methods of Teaching Beginning, Intermediate, and Advanced Adult Literacy. These courses link methods to research as well as the three documents for standards in ABE: CCRS, TIF, and Northstar Digital Literacy Standards. The "Methods of Teaching Adult Literacy" course descriptions highlight these components. See Appendix G for the course descriptions.

These courses highlight explicit strategies and how they link to the content standards, which are part and parcel of the curriculum for many ABE teachers in the state

of Minnesota. Kate, a teacher hired by a CBO prior to enrollment connected a task as an ABE teacher at CBO to what was learned through an online methods course. In addition to teaching in the classroom, teachers at CBOs often take on grant writing tasks with other teachers and administrators. That is precisely the context of the following statement:

Kate: "I actually was just applying for a grant...and it was going over best practices and standards and so I knew the language for that. So I went through the course [material] again and what was useful for me."

Kate learned the language of what supports best practices through online methods courses. She demonstrated the ability to discriminate between useful and irrelevant information for her particular context as well. This is similar to what Roger learned about lesson planning. Lesson planning was re-envisioned for this experienced teacher, in which he needed to look to the standards as the foundation for what and how he taught. While not enthusiastic about having to learn standards, he recognized their importance. In the following statement, he discusses what his previous practices were and how they have changed to align with movement of the field:

Roger: I try to keep track of all the websites that people would come up with. You know, the ATLAS and the MLC, and of course the lovely CCRS resources that are really good...I did learn a lot, which...it's not my natural inclination to pour over the standards and then write the lesson."

Roger referred to his natural inclination to write the lesson and then look to any standards. He indicated that the online methods courses forced him to think deeply about how standards apply to his lessons.

However, this was the first time Roger had "poured over" the standards, as his drop-in center has been slow to implement them. Some experienced teachers described below have not participated in any of the standards-based cohorts given where they work, such as Sharon, who works at a CBO where "you're kind of on your own."

Theory as foundation.

In contrast, experienced teachers from earlier iterations of the program found that the in-person adult learning courses contribute to their practice in various contexts. Those who work at CBOs cited a social justice orientation as informing the decisions they make in terms of their materials and approaches in the classroom. Karen, an experienced teacher from an earlier iteration of the program, cited Freire (1970) as an influential figure in her teaching life. These types of theories were discussed in the "Perspectives of Adult Learning and Development" course. See Appendix G for the course description.

Freire is discussed as a major critical theorist in this course. As such, prior to the following statement, Karen discussed her previous experience in a secondary education program, but through that experience, began to think about education in different ways, though she was not sure what it was. Her current experience involves social justice initiatives, including what she described as the "#IamABE movement" where ABE

learners get to know their rights, how to refute stereotypes about their community, and share their points of view via social media. Through the in-person perspectives course, she developed her orientation toward teaching through the principles of critical theory:

Karen: "*So much of the stuff that we talked about in class was theoretical and I think it really transformed the way I think about who adult learners are and what we're doing in adult education. That has shaped ways that I have oriented myself toward the classroom...But I think the social justice perspective that I bring to the classroom was very much shaped by the theory that I got from the university. Freire and also just we just talked a ton about authentic materials and what adults really need and I would say that that affects what things I bring into my classroom, like I'm really focused on realia."*

Karen's sentiments towards what she learned in in-person classes were echoed by Sharon, an experienced teacher at a CBO who has previously worked in workplace English programs. Sharon derived her teaching orientation from the "Strategies for Teaching Adults" in-person course, in which she learned about interactive models of instruction to facilitate conversation. This model is emphasized by the course description, in which students learn about "philosophies behind instruction of adult learners, teaching adults versus teaching students, instructional techniques and design for adults, approaches to teaching diverse adult learners, [and] strategies for teaching groups of learners." Sharon described her use of conversation as a way to convey practical information to adult refugee learners:

Sharon: "I think I've used the interactive model heavily because I really latched onto that. In fact, I think I do too much talking, but a lot of what we deal with, I think is information that is good for people to have. Today we talked about recycling. You can no longer throw this out and we made a list...You know, just practical...I try at the end of class to do a conversation that I had [on the board], so we change part of it for a different product."

Sharon's use of the interactive model reflects one of the strategies for teaching groups of learners. She also acknowledged that people may know the concepts, but "may not have the language for it." This emphasizes differences between teaching adults and children in the "Strategies for Teaching Adults" course.

Expertise through Engagement in Research-Based Practices: Tried and True Versus New and Innovative

There was a clear distinction between novice and experienced teachers in recent iterations of the program with regard to what they wanted to learn about methods. However, in the case of the inexperienced teachers, what they wanted to learn was quite different from what they described as potential solutions to problems in the field. These problems required flexibility rather than rote understanding of method, though successful application of the method was discussed if there was an accompanying field component in which to try the new approach.

Experienced teachers, on the other hand described a much broader approach to teaching derived through research. Both groups, therefore, described ways in which new

and innovative practices in the field can be exhibited with access to the field as an element contributing to successful application of methods. These scenarios will be illustrated by lesson plan assignments and discussion assignment descriptions that required evidence of reflection on fit of approaches with student needs and goals in the "Methods of Teaching Adult Literacy" courses.

Transformation of tried and true methods through discussion components.

Lesson plan assignments with discussion components required program participants consume research, reflect, and apply with a plan that aligned methods to student goals and needs. While hypothetical, students were forced to justify plans for a variety of scenarios. As such, differentiation for both program participant needs and those of their hypothetical students was a concept they were introduced to through these assignments. In a typical sequential assignment example from "Methods of Teaching Intermediate Adult Literacy" below, program participants were asked to consider their own contexts, identify learner needs and goals, apply an appropriate method, and justify their choices. They then had to use research and what they know from experience to affirm or question their colleagues' choices.

Think about your respective teaching contexts (or where you would like to teach). Then, in 1 to 2 paragraphs:

- Identify intermediate learner needs and goals regarding math
- Describe a short lesson (approximately 15-20 minutes) in which you use a strategy or method (or any combination of strategies and methods) discussed in this week's readings
- Provide a brief justification of why your chosen methods would meet the needs and goals of your learners (2 -3 sentences)

- Respond to at least 2 of your colleagues (1 substantive and 1 not requiring references). Your substantive response should include references to the readings and your personal experience if applicable. Always feel free to respond more!
- Feel free to bring in outside readings. Include a reference list at the end of your responses to colleague's questions (if necessary)

Similarly, the microteaching presentations (a component of all methods courses) required identification of context, application of methods, justification for choices, and discussion with colleagues:

Design a 15-minute Microteaching Presentation

- Think about the context of a class in which you would teach a lesson to intermediate readers. Design 3 learning outcomes for your hypothetical learners. You cannot use the verbs to learn, to understand, to appreciate and their ilk. Think of Bloom's Taxonomy when designing these outcomes.
- Plan a 15-minute segment (review your vocabulary lesson plan and feedback as well as the readings on various strategies for teaching comprehension and fluency). I suggest you plan a full class session--objectives, teaching/learning activities, assessments, etc. first, then determine a segment for your 15-minute segment—but you will only be sharing the 15-minute segment
- Create a PowerPoint Presentation that you will show your classmates. Elements to incorporate into the session plan include the learner demographic, course title, class session title, information about learning outcomes, and an outline of the overall session. Develop slides only for the segment you would teach.
- Write an introduction to your teaching segment that includes all of the information we need to know about what you plan to teach for this class (i.e., elements in the session plan: course title, the learner demographic, learning outcomes, activities, assessments planned for the course, and your outline for your class). This should be your first slide after the title
- Use the “notes” component of PowerPoint to describe how you might teach your 15-minute segment in more detail
- Include a slide for references at the end of the presentation

Access to the field while taking courses facilitated application of new concepts. Erin, a volunteer teacher at the time of enrollment described her teaching context as led

by volunteers where "one class gets 4 different or 5 different teachers for the week. She said she was interested in learning about "making lesson plans and that type of stuff," which she did based on the assignment descriptions above. For Erin, lesson planning was already done for her at the time, as it was "already pre-planned...and universal among teachers," so it stands to reason that she would want to learn how to lesson plan. She learned how to do that in the online methods class, but coupled with her concurrent experience in the field, she was able to apply new approaches in the classroom through assignments that discussed hypotheticals in changing environments such as the one above, as she said she "had to use [her] judgement to pick and choose" methods and materials depending on who was in attendance, who was absent the previous day, etc.

Evidence of her learning is in one of her lesson plans from the course, in which she responded to a question about scaffolding and cited the need to scaffold mathematical concepts via the "I do. We do. You do" approach cited in materials from the Minnesota Literacy Council. This method applies appropriate support, increasing or gradually releasing it, for learners at a variety of skill levels in a variety of contexts.

The method of instruction is negotiated according to content and context, suggesting standardization of content as opposed to practices. Participants discuss the content area of focus and the applicable methods according to their teaching environment. However, their colleagues presented challenges to their choices, forcing them to reflect and amend the decision, as was evidenced by Erin's remark about using her judgement and subsequent reflections on the need to scaffold based on the sporadic teaching conditions (i.e., a different teacher every day) of her work environment. Conceptualizing what can be done given certain conditions was a major takeaway from

participation in discussions from recent iterations of the program.

Research provided problem-solving solutions in the moment for some participants. Kim worked in a similar environment as Erin with volunteer teachers and was adamant about benefiting from “explicit instruction” of “teaching reading and phonetics” as opposed to learning about “vague concepts [that are] talked about a lot.” Participants in recent program iterations did receive applicable research-based information, such as the strategies discussed in McShane’s (2005) *Applying Research in Reading Instruction for Adults*. However, reflection on these research-based methods in a lesson plan/discussion assignment led to Kim being able to adapt to the changing context of the classroom. She echoed Erin’s sentiment about making judgement calls based on an understanding of the whole context in her example of being prepared for a pre-literate class, but teaching an intermediate level when she said, “so I just pulled concepts from the plan and it was cool.” Research-based concepts and subsequent reflection on those concepts as required by the assignment facilitated success in a changing work environment.

Research-based practices that receive reflection may also lead to amended practices. In a follow-up interview, Kim said that she does “use McShane’s research-based practices all the time,” in her new position as a one-on-one tutor, but only to structure activities (See Appendix C for a sample lesson plan). Similarly, Mary, an inexperienced ABE teacher with a new K-12 license and working a district based site described wanting to learn about “tried and true” resources. However, the content of the discussions, research-based practices, and subsequent reflection on them, allowed her to amend prior practices of having to “invent something and realize that [she] was missing

this and this.” Instead, she got ‘connected to things that are...well-established, so [she] can tweak it a little bit” to her classroom.

Innovative methods through discussion components.

Experienced teachers enrolled in the latter portion of the program cited wanting to learn about broader issues of teaching and learning (e.g., individual and group learning, barriers to learning, applications of creativity) and confirmed that they indeed did learn about them. Instead of citing wanting to learn about tried and true approaches, they were examining the big picture of who and where they were teaching coming into the program and emerged with useful approaches.

Roger described a broader initiative than mere knowledge of methods of literacy instruction and application in a formal classroom environment with young adults. He described wanting to “put the onus in the students rather than [him] teaching.” He then went on the explain that he gives them “more opportunities to figure out what they’d like to learn that day and then be able to bring it to the next class and still have it available at hand.” Roger referred to only “scratching the surface” when it comes to group learning and individual learning, but the discussions about McShane’s (2005) applications of research-based practices discussed the importance of learner control over learning and understanding why they are completing a task, where he saw an immediate application to his unique context.

Similarly, as a teacher well versed in ABE content, Joy noted wanting to learn about non-academic issues, such as the factors contributing to lack of student persistence and correct placement after pre-testing. She said, “I was more interested in placement and

making sure the learner is given the right to be where they are and move forward. And in an adult education class that could mean 20 different people at 20 different starting points." Like Roger, she went on to link research to address her broader issue. While not directly related to placement, she cited discussions about applications of Universal Design Principles for Learning (UDL), an educational framework grounded in research on learning sciences that guides flexible practices to address individual differences (Hall, Meyer, Rose, 2012), as helpful at her site, a college where she is the only ABE instructor, where they have recently " integrated ABE into the read/write and the [developmental education classes]" increasing challenges she encounters with student placement (i.e., ABE or developmental education). In response to the question about applications of program knowledge in the field, she linked discussion about a research-based practice in the discussion to her new teaching conditions when she said, "and so when we were talking about placement and…universal design…it's at a time when I'm reading it, I get it, and I'm using it." UDL has been helpful for her as the sole ABE instructor where she is forced to be innovative to meet student needs.

Kate experienced similar applications of research in her context. She wanted to learn about new research practices, but she found it supported her tendency to "try new things." The online methods courses allowed her to both confirm and develop her current practices. She said, "it was nice to see research that backed things up [that I was doing] and ways to take broad ideas that have been done by other people. It makes it more concrete," which was echoed by Joy's connection of UDL as something she is currently doing that is grounded in research. She also alluded to how research-based practices "support [her] teaching instincts" similar to Roger's experience of using research to

support his instinct to reframe his approach to how his young adult students learn.

Erin, Kim, Mary, Roger, Joy, and Kate were able to demonstrate application of appropriate instructional methods through lesson plans with discussion components and, Kim and Joy, in particular, were able to apply the methods flexibly in the field. All of these components required a degree of reflection, which was facilitated by reading, completing the assignment, returning to it to answer questions and, in some cases, applying it in the field.

Expertise through Modeling as a Teaching Strategy: Seeing Versus Doing

A key difference the expertise development process between inexperienced and experienced teachers is how they experienced the concept of models as a teaching strategy. Modeling for inexperienced teachers in later iterations of the program was a receptive experience via online methods course content. In contrast, experienced teachers in earlier iterations of the program see models, but also take on the role of modeling in these courses and in the field.

Modeling: seeing.

Inexperienced participants emphasized the importance of being able to see expert teachers model methods and approaches. In particular, the videos in online courses and site visit assignments that targeted specific methodological observations, facilitated this process. The following observation guide is one of the versions used for site visits (this one with an interview component) in introductory and methods courses:

What is the learner demographic (age range, languages, cultural makeup of the class, etc.?

What are the typical literacy-related strengths and challenges of learners?

What input do the students have in regard to class content?

Is there any technology in classrooms/in the facility? How is the technology used?

Are principles of Universal Design incorporated? If so, how?

How does the class or program assess for disability? Address the needs of learners with disabilities?

Would you describe the content as life-skills/work-skills/academic etc.?

How were standards (CCRS, TIF, and Northstar) covered?

If standards are implemented, how are they monitored?

What initial and ongoing professional development do teachers have?

Feel free to add any questions to suit your particular context.

Mary and Erin described their respective experiences with each of these elements as not only informative, but they received a template adapt to their respective contexts. For example, Mary said, "I think discovering resources and seeing them modeled by professors has been really helpful. As a new teacher, all the modeling I can get is great." Erin echoed this sentiment by describing observations as "like a modeling of ideas" for many principles, such as UDL, and approaches, such as level-appropriate literacy methods. Mary extended this claim when she said that seeing a model implement certain approaches pushed her take on her individual challenges as an instructor:

Mary: "[I saw] the importance of things outside my comfort zone, just recognizing how important they are and how much I need to incorporate those things into the classroom.

Just like digital literacy and the anxiety people have when doing that. Just being able to encourage them that this is why."

Watching expert teachers via video and in-person facilitated understanding of various approaches but also encouraged participants to experiment with their skill set.

Modeling: doing.

Experienced teachers in earlier iterations of the program, however, had occasion to be observed or learn from and perform models in an in-person class. While not a part of the recent iterations of the program in which the participants in this study enrolled, program instructors would observe a teacher and provide a demonstration for the class. For example, Karen, a teacher of pre-literate students had observations done in her class. She outlined the experienced as follows:

Karen: "I had an experience early on when Rosemarie Park came and observed me just because I had been talking so much about my site and so I actually had an opportunity where she observed the class and stepped in and did a demo. So that was interesting."

Teachers who may have experience still received modeling of approaches, but they were modeling their approach for an expert from the "Strategies for Teaching Adults" and Perspectives of Adult Learning and Development" courses as well. The demonstration done by the expert reinforced and extended what Karen was already doing through execution of an approach supported by theory, evidenced by Karen's statement

that the demo and subsequent conversations in class "transformed the way [she thinks]" about ABE.

Helen, a teacher of pre-GED students, described what she learned from this sort of model that she saw and performed in in-person courses, which she implements in her classroom. She said she thought she learned "different ways to work with adult learners, respectful, making it relevant to their learning and their lives, having students persist, challenges and even with large challenges with learning disabilities and such," which she now imparts to her volunteers, such as "finding creative ways for students to develop their critical thinking skills."

Inexperienced and experienced teachers experienced models in different ways: seeing and doing. A critical difference between the two groups is what they learned from the modeling experience. The former group learned a template for literacy instruction, whereas the latter took principles for teaching adult students. Some of this difference may be attributed to the level of experience, some to when the participant was enrolled in the program. That is, new enrollees with little experience seek out models for content, whereas experienced teachers look for methods of effective practice. However, these models cut across contexts when the focus is principles for adult teaching. Additionally, program faculty observation was a past component, so new enrollees were unable to enhance their understanding of the content in their courses in the same way. The next theme examines these differences.

Understanding Teaching Context as a Part of Expertise

The final theme speaks to the differences between the varied teaching contexts in

which ABE teachers work. Conditions regarding the physical space, job protections, and pay differ across contexts, so participants found value in certain program components depending on what they felt they needed to address in their respective teaching contexts. Participants in later iterations of the program found more resources for navigating the system in which they are employed due in part to efforts to establish resource repositories, which have been of use for those working in school districts. Those working in community-based organizations and a participant in an early iteration of the program, however, relied on theory-based courses to help them understand their organization.

Expertise through Knowledge of Managing Systems: Navigating Versus Combatting

Inexperienced teachers cited a key takeaway from the program as access to repositories of resources and understanding of consortia programming. They learned that they need to navigate systems. However, those who were experienced and enrolled in the Master's of Education (M.Ed) in adult education used human resource development (HRD) courses to gain a better understanding of their current teaching context and attempt to take action. They were combatting systems. Identification of the issues was the most salient consideration. Both groups discussed problematic working conditions that persist, but they do provide alternatives. Only one participant, however, was able to apply course concepts to address ongoing problems.

Navigating systems.

Inexperienced teachers enrolled in the most recent iteration of the program had access to an abundance of resources. Their task, then, is to navigate those in the field. For instance, Mary noted the usefulness of pre-made and well-established resources, but

when there are many available, she must use her judgement to decide which to use:

Mary: It's using my own time to find it and right now I'm in a situation where I have too many resources, I just have an abundance of materials and how do I decide which to use when. Time is a resource I would like more of."

Inexperienced teachers in the most recent iteration of the course also must navigate the multitudes of programming available to adult learners, even within one area of ABE. In the "Designing the Adult Education Program" course, Erin learned about different kinds of programs for different learners in the correctional system through a research project. She said, "you're talking ABE for offenders, ABE for at-risk youth, it's so broad." Therefore, professional development will need to address these broad contexts through targeted and differentiated approach.

Combatting systems.

Experienced teachers were either able to develop an enhanced understanding of their working conditions or enact change in their current context through coursework. Helen alluded to her experience in a program design and planning class as confronting her experience in the field. She had learned much of how a district functions, but was frustrated by the licensure program's focus on program development:

Helen: "I felt that a lot was focusing on program development and many teachers do not work on program development. That would be more for admin, like if I were to revamp, I

would say you need to focus on classroom management and not so much on program development. Whenever are we going to create a program? It's not going to happen. They [admin] understand the whole dynamic"

Helen's interpretation of program development may be broader than that of other participants. For example, Kate and Joy who work or have worked at CBOs, non-profits, or district satellite sites both contend that they were part and parcel of program operations, where Kate "[helps] with the curriculum and Joy conducted intake and "developed file systems for teachers" when she was "a pack out of your trunk kind of system," referring to her status as an itinerant teacher at the time. She is also currently designing the soft skills training for a new program, as she expressed, "I'm going to do soft skills and do no matter what sector. The program is going to be run."

Helen combats the system through her understanding of how school district-based sites control many of the decisions that the previously mentioned participants made in ways congruent with principles of program design taught in the licensure program. She described how the system worked:

Helen: "You can have a really good idea, but it cannot be implemented, it has to be brought to the next level of decision making and higher up. It's hard. A former colleague referred to it as, she said it's like the school district is like a big dinosaur in a small room that needs to turn around. It's not going to happen without breaking down some of those walls but they're hard to break down. The dinosaur meaning it's an older school district built upon things from the past and just moving those walls.

The dinosaur in a small room metaphor demonstrates the inflexibility of an antiquated system that prevents teachers like Helen from participating in the planning process. Doug echoed dismay with school district control over professional development practices that silence voices:

Doug: Just getting a variety of viewpoints and I think it's not ideal to have one person or two people plan all the pd and that unfortunately has been the case with xxxx, someone brings in someone they think is important and this year we have someone present a training which was intellectually light."

In the planning process, one of the "how to" techniques is to involve all stakeholders at the planning table. These "how to" techniques are part and parcel of the "Designing the Adult Education Program course. See Appendix G for the course description.

In contrast, some courses provided the foundation for enacting changes in organizations. Karen, an experienced instructor used what she learned in the master's program to improve the working conditions in her organization, a CBO whose primary service is not education. Through participation in an organizational development course as a part of the licensure program, Karen learned about action steps to improve organizations in transition. In the following excerpt, she describes how the program facilitated understanding of how to address challenges in community-based organizations and increased one's role within the larger organization:

Karen: "I don't apply any of those skills in the classroom but the organization that I work for, because it's a community-based organization that has gone through a lot of transition, I've definitely used those skills to improve our program. And I've also considered on different occasions whether I wanted to manage a program, but I'm not interested currently, but I do have some education in those areas so sometimes I think about that."

Karen went on to describe the conditions in which she worked and what she accomplished, including developing relationships with the people who have control over change:

Karen: So at the very beginning, it had to do with space. We had a ceiling collapse, we had mushrooms, it was too small for the number of students, cockroaches and mice...I actually filed an anonymous report with the fire marshal and the fire marshal showed up and checked out all the stuff that was going so that was the civically available resource not within the organization. We had a really abusive manager at one point. She was verbally abusive and intentionally creating conflicts between employees. We actually as a group to teachers went off site and had a meeting and made a plan, went to the CEO and we each shared a story that exemplified one of the issues we were experiencing. She was not fired but she was kind of forced. She quit very shortly after. It's been a lot of stuff happening as far as this is what we need. This is what we have control over in our department. Developing relationships with people in other departments was helpful."

Similarly, an M.Ed participant, Helen, suggested a way in which systems could change:

Helen: "go out to our K-12 community to tell them who we are and what we do and that we are licensed professionals that have the same equity and we are looking for equity because I work in the evening, so many of my colleagues, might work during K-12 during the day or a few nights a week and say oh, I didn't even know there was a license, or oh, you guys don't make that much money. I work for xxxx, we are two different salaries. It's just that sort of thing like that that will raise up the level of professionalism. I'm amazed at how professional we are for the low salaries we get. It is appalling when I tell this to my licensed friends, many of whom who are nurses. What? You're not paid more to work at night? What? You have to do a split shift without being paid more. We're not paid the way K-12 teachers are, so come help spread the word."

Karen expressed similar concerns in her comments about janitors getting paid more than teachers.

Teachers such as Joy, who has worked for a variety of organizations and did not take the organizational development course, cited institutional barriers to continued development depending on teaching context. In response to a question about organizational support for ongoing professional development, she said, "there are some really big differences when you're paying agent is an ISD or a non-profit. And so, when I was working under xxxx, we were run through the community ed office and I believe the funding might have been partially the school district and partially community ed." She

relayed that she "did not understand how the funding worked." Sharon echoed similar constraints working for a CBO, "where there seems to be such a limited budget for these extra meetings...I mean for the summer intensive, I have to take off and not get paid for the tuition. And that's fine, but you're putting it the time, but you're not paid. I think it's also the professionalism. You really should be getting paid for this and not just doing it." Foundational knowledge in systems may be critical for understanding how to enact change.

On the other hand, some participants enrolled in the M.Ed were only able to speak vaguely about professional development at their organization. For example, Mary said, "it's student-centered. But we don't, things aren't structured to...we do work together, we do pd and we do have cohorts, but I wish that structure incorporated that as a bigger part of our job." This hesitance about procedure and reluctance to enact change was reiterated by Doug, we he said, "there was some support if I didn't plan enough time to explore certain conversation with the students. There are still some needs that are unmet. I suspect that ABE doesn't have the staffing or the funding of a K-12 setting." As such, findings are contradictory here and may be dependent on other variables, such as support from colleagues.

Some of these foundational adult education and HRD courses addressed standards of effective practice for teachers. For example, standard 11A, teachers must "understand schools within the larger community context and understand the operations of the relevant aspects of the systems within which the teacher works" (PERCA, 2017, p. 29), but the standards make no mention of how to change the organization, which will be discussed in the next chapter.

Table 4.1 Summary of Findings: Program Components Contributing to Knowledge and Expertise Development among Participants

Experience/ Program Entry	Participants	Knowledge	Expertise	Program Components
Experienced/early entry	Karen (K3) Sharon (S9) Helen (H10)	Conceptual Conceptual Conceptual	Adaptive Adaptive Adaptive	Adult learning theory, Modeling
Inexperienced/late entry	Erin (E1)	Procedural/ conceptual	Routine	Online discussions, Research
	Kim (K5)	Procedural/ conceptual	Adaptive	Online discussions, Research, Field experience
	Doug (D4)	Conceptual	Routine	Online discussions, adult learning theory
	Mary (M6)	Procedural	Routine	Modeling
Experienced/late entry	Kate (K2) Roger (R7) Joy (J8)	Conceptual Conceptual Conceptual	Adaptive Adaptive Adaptive	Online discussions, Research

Summary

While we know that expertise is the product of participation in this program, it was necessary to interpret application of knowledge gained through specific program components. To fully understand the individual and situational facets of expertise through a credentialing program, it is imperative to view the similarities and differences between program participants' experiences of those components. All participants benefited from engaging in discussion with one another where informally-gained knowledge could be negotiated with the formal through scenario-based learning and

concurrent field components. Experience and time of entry into the program factored into the degree to which participants benefited from other components. Finally, a broader, systems perspective helped experienced teachers understand their teaching contexts. The kind of knowledge gained from each component was either procedural or conceptual, with a conceptual enacting more change in practice.

It is apparent that conceptual knowledge was dominant among experienced participants, whereas inexperienced teachers discussed both procedural and conceptual knowledge, but wanted more procedural knowledge integration in the program. Adaptive expertise comes into play with more experienced participants used to teaching in the field, integrating more informal, experience-based knowledge. Formal, procedural knowledge was essential, but not enough for every environment, as volunteers with pre-determined curricula could enact small changes to meet needs.

Development of expertise via one ABE credentialing program seemed to be dependent on several program components: engagement with colleagues in the field via online discussion and field components, foundations of adult education through teaching methods courses grounded in standards and general adult education courses, discussion of best practices facilitated by reflection, seeing and applying models of best practices, and managing ABE systems for improved working conditions. The majority of inexperienced teachers developed routine expertise while demonstration of adaptive expertise required an accompanying field component. Given immediate access to the field, the majority of experienced teachers gained adaptive expertise. These components promoted a negotiated understanding of multiple contexts that either resulted in routine or adaptive expertise.

It was striking that standardization of teaching practices did not emerge as a

component of expertise; rather, it was standardized content taught. Recent iterations of the program encouraged flexibility and innovation to meet a variety of needs across and within settings. The professionalization process contributed to expertise through conceptualization of what adult learners need and what ABE does in different contexts rather than explicit instruction.

Granted, with methods of instruction, new teachers experienced this differently than those with experience, as inexperienced teachers required a template on which to structure standards, time to reflect, time to try it either in the field or presented to colleagues in class, and then a return to content revise instructional decisions. Inevitably, though, conceptualizing issues at individual, classroom, and organizational levels enacted change in perspectives about teaching, approaches to teaching, and managing the culture of the organization.

The following chapter will summarize the conclusions of the study, discuss findings in relation to other research, present implications for further research and practice, and delineate limitations of this study.

Chapter 5: Conclusions and Recommendations

The purpose of this chapter is to discuss findings of this case study. First, the purpose of the study and research questions will be revisited. Second, conclusions based on findings and research questions will be presented. Third, conclusions will be discussed in relation to relevant research. Fourth, recommendations for research and practice will be suggested. Finally, limitations of this study will be discussed.

Overview

The purpose of this study was to examine what expertise looks like and how it was developed through specific ABE licensure program components. The skills participants developed, methods of delivery, and application to their respective fields were examined. My primary research question was follows:

How are the individual and situational facets of expertise and their implications for teacher education conveyed (or acquired) through the program coursework?

The following four main research questions guide the study to address both individual and situational facets of expertise for pre-service and in-service teachers:

- What kind of expertise do inexperienced program participants gain from courses in the licensure program?
- What kind of expertise do experienced program participants gain through the licensure program?

- What program components to the development of expertise in ABE program participants (e.g., online discussions, site visits, microteaching presentations, lesson plans)
- How do program components contribute to the development of expertise in a variety of teaching settings?

Conclusions

The purpose of this study was to gain greater insight into the development of expertise through the process of professionalization, specifically, through a unique credentialing program. This study may be useful to adult literacy researchers, practitioners, and stakeholders interested in documenting evidence of professional knowledge through a credential in three ways. First, it identifies ways in which credentialing programs develop ABE teachers. Second, it adds to the research base on teacher development in ABE in a new way. Not many credentialing programs for ABE exist in the United States. Third, it expands awareness of a dynamic field that was initially slow to change, but has made significant strides in the area of professionalization within the last five years. This awareness could increase opportunities for further development across diverse ABE settings in the nation.

Upon review of the findings and the four main research questions, four conclusions became apparent. The following are brief descriptions of these conclusions:

1. Inexperienced ABE teachers looked to the fundamentals of teaching through research, discussions, and modeling in the methods of teaching literacy courses to develop a repertoire of basic skills that reflect routine expertise.

2. Experienced ABE teachers developed adaptive expertise through courses that connected theory, research-based practices, and modeling methods to their teaching contexts.
3. Engagement with colleagues in a community of practice through collaborative tools and assignments was critical to the development of adaptive expertise, but only if the participant had immediate access to practice in the field.
4. Expertise in problem-solving at the organizational level across contexts was developed for participants with raised awareness of systemic issues in their setting and opportunities to reflect in practice. This awareness was raised by coursework in organizational systems. However, it is unclear if this problem-solving ability is due to adaptive expertise, type of teaching setting, or individual ability to reflect and enact change.

The conclusions align to each research question. Each theme fits within one or many of the conclusions depending of the similarities and differences between level of experience and time of program entry. The following section includes a paraphrased version of each conclusion above and the themes that illustrate them.

Discussion of Conclusions

Inexperienced Teachers in Later Program Iterations Developed Routine Expertise in Methods of Teaching Adult Literacy

Inexperienced teachers enrolled in recent iterations found coursework in Methods of Teaching Adult Literacy that were connected to content standards to develop a basic

toolkit of strategies was needed before they could contemplate abstract concepts in adult theory courses. Many developed the procedural knowledge required for routine expertise. This routine expertise did not necessarily translate to implementation of content standards; rather, participants left with an understanding of their meaning to adult students as opposed to how to use them in their classrooms.

Expertise through understanding foundations of practice: standards as foundation.

Content standards partially formed the foundation of what participants understood about learner needs and goals. Inexperienced teachers in later iterations of the ABE licensure program found that the emphasis of coursework in methods of teaching was on understanding the new content standards, which were part and parcel of foundations of their practice. While these inexperienced teachers in an ever-changing field required a working knowledge of the standards of practice, their understanding of the content standards did not necessarily translate to implementation.

Inexperienced teachers in this study discussed the various foundations of their practice, including the new content standards, which are new to some participants as Minnesota is still actively implementing them in facilities across the state. For example, Roger (an experienced teacher new to ABE) spoke of revising his lesson planning process as it was "not [his] natural inclination to pour over standards and then write the lesson." There was a re envisioning of lessons, but no application in practice.

There is scant research on the application of standards in ABE, but at least one

study in the United Kingdom reveals a similar movement towards standards but uncertainty toward how to implement them. For example, the portfolio approach to teaching and learning offers flexibility and choice concerning national standards and reporting. Teaching within this open framework can be difficult, as "teachers need solid training that will allow them to develop the confidence, knowledge, and skills needed to create good teaching practices" (Hamilton & Merrifield, 1999, p. 24). This guidance for implementation is difficult to provide in an online environment, but participants such as Kate, though experienced in general instructional methods through the Peace Corps, mentioned that coursework linked explicit strategies to standards in a way that she could talk about standards implementation, suggesting familiarity with how to implement, but lack of experience in executing the process.

Knowledge of content standards and their meaning to the ABE field was a common takeaway from the methods courses in later program iterations. However, explicit knowledge of implementation procedures as they relate to each unique teaching context was not apparent. A similar need for guidance of implementation, ability to demonstrate methods, and receive explicit feedback while in the field was necessary for inexperienced teachers learning about research-based practices.

Expertise through engagement in research-based practices: tried and true.

The way in which participants engaged with research via discussion components attached to lesson planning is indicative of a level of adaptive skills, but that was only apparent for those with access to their own classrooms. Kim problem solved as she "pulled concepts from [a] lesson" to meet her changing work environment, for example.

In order to do this, she needed to engage with the material, explore meanings via lesson plans shared with colleagues, reflect, and explore of alternatives, which is indicative of the exploration and reflection that Oura and Hatano (2001) claimed underpins the learning process required for flexible and creative application of skills. This follows the recommendations of Smith (2016) that ABE practitioners need time to summarize and discuss research, time to reflect to judge the applicability of the research, and the appropriate outlet to use the research.

The licensure program did not provide an outlet for field work beyond the field experience requirement, such that many pre-service enrollees were not able to apply what they learned unless they were completing the field component with the methods courses. Alignment of field and course work is supported by the competence model of professional development of expertise in the workplace, in which “current and relevant knowledge must be combined with other skills (such as critical thinking or interpersonal relationship skills)” that are required for different workplace settings (Mott, 2000, p. 25). In this model, the professional must understand what they must know (procedural knowledge) to implement standards as well as what that means for an ABE teacher in different teaching environments. However, the experience of pre-service teachers stops short of this model in the latter portion of the definition due to the restrictions of volunteer teaching. While this alignment of field work and reflection during online discussions encouraged Kim to think critically and amend previous practices in terms of her delivery, the lesson plan was predetermined, restricting what she could actively implement as a volunteer teacher. Similarly, while Erin could use her judgement about

what to emphasize in her lessons, the routine of how to deliver each lesson component was predetermined. Her growth in lesson planning was evident during the course; however, just like in the case of Kim, hypothetical situations in different environments were merely discussed with colleagues.

To truly develop adaptive expertise, an established basic toolkit of methods and active monitoring of implementation was needed for inexperienced teachers to effectively apply what they learned in online courses. Both Erin and Mary remarked on learning the basics of teaching adults and Mary in particular said she wanted to learn "tried and true" methods. Mary could make some changes to existing materials based on what she discussed in the methods courses, but has unresolved questions regarding delivery of methods and classroom management, the latter or which was frequently mentioned as a high priority among inexperienced participants. Seeking a basic toolkit stands in stark contrast to the value placed on theory by experienced teachers. Statements from inexperienced teachers often alluded to concepts being "vague" or "broad, which is supported by Patterson's (2016) argument that some adult educators deem research inconclusive or too difficult to apply. Kim's contention that learning about phonetics and teaching reading was more important to her as a beginning teacher than discussing broader issues suggests an unfamiliarity with procedural knowledge of methods. To make research-based principles accessible, teacher candidates must be actively monitored while in the field.

Thus, through online coursework, inexperienced teachers gained the procedural knowledge of methods and ideas for application, but needed to have a field component to

support implementation. Furthermore, the implementation demonstrated routine rather than adaptive expertise as teachers became familiar with tried and true methods.

Expertise through modeling as a teaching strategy: seeing.

Modeling of best practices provided participants with an enhanced understanding of methods underpinning them across content area and levels, but few participants mentioned it as a consistent component of the program. Those inexperienced participants in recent iterations of the program who did experience modeling as a teaching strategy as a critical component to coursework discussed developing a strong schema for teaching through online courses presenting videos of experts and providing assignments requiring site visits.

An expert model was cited by some inexperienced participants as necessary for development of how to perform certain methods. The kind of knowledge developed by viewing models is indicative of the procedural knowledge typical of routine expertise where teachers may demonstrate superficial knowledge (i.e., step-by-step recitation) or deep knowledge of methods (i.e., explaining how steps are related) (Baroody et al., 2007). For example, Erin regarded demonstrations via video and in-person site visits as a "modeling of ideas," where methods and principles became more concrete in visual form. Similarly, Mary was encouraged to use what she saw as a template for approaches she found challenging. Where Erin saw the model as providing concrete steps for methods, Mary has integrated an understanding of how the steps may be applicable to her context.

However, even a fluent display of methods in the classroom may not be an

indicator of effective delivery. Although part and parcel of expertise, professionals must possess more than domain knowledge. Expertise also has socioemotional and sociocultural dimensions (Schweder, Goodnow, Hatano, LeVine, Markus, & Miller, 1998). The models that inexperienced teachers were able to see reflected implementation of concrete methods and were only partially assisted by other people in videos and site visits. However, the "socioemotional changes...such as interest values, and identity" (Hatano & Oura, 2003) and explicit discussion and practice in solving socioculturally complex problems were not observed or enacted by participants according to their interviews.

Inexperienced teachers had an opportunity to see models of effective practice via online videos and site visits. However, these models were limited to methods of teaching, providing the procedural knowledge required for routine expertise and may lack confidence in implementing methods. Most of the experienced teachers, on the other hand, had ample experience to draw upon for the self-assessment and discussion of any socioemotional changes and complex teaching contexts they have experienced.

Experienced Teachers Developed Adaptive Expertise when Courses Content Connected with their Past and Current Teaching Environments

Experienced teachers developed adaptive expertise through engagement in courses that supported or challenged informally or nonformally-acquired knowledge. The informal and nonformal knowledge may have been acquired throughout their teaching careers or through past professional development. Experienced teachers with

training in K-12 instruction also found support in the adult education theoretical foundations. Engagement in coursework on theory, research-based practices, and models of best practices were noted by participants only if they had the ability to reflect, discuss, receive explicit feedback, and revise their approaches in their respective contexts.

Expertise through understanding the foundations of practice: theory

Foundations in adult education courses that emphasized theory and models of teaching provided the foundation for teaching practice of experienced teachers in recent iterations of the licensure program. These courses provided conceptual knowledge in which teachers could solve problems meaningfully (Baroody et al., 2007). Additionally, as most indicated that they had knowledge of methods from prior degree programs or professional development, theoretical foundations informed many of the instructional choices they made.

Experienced teachers with access to their own classrooms not only actively implemented the conceptual knowledge they gained from their coursework, but it changed their orientation toward teaching. For example, Karen and Sharon base their curricular and delivery choices on theories or models they learned about in the in-person foundational courses in adult theory and strategies for teaching adults. Karen articulated that her experience in a secondary education program provided her with instructional tools, but critical theory as discussed by figures such as Paulo Freire informed the way in which she implements those tools with adult learners, such as through the use of authentic materials and realia. Similarly, Sharon delivers content through communicative activities as much as possible as a result of learning about the interactive model of

teaching, which was not emphasized in her early volunteer work.

These examples of re-thinking one's orientation toward how adults learn is evidence of adaptive expertise. Karen and Sharon referred to understanding the ways in which adult students learn and why they attend ABE services. In the example of Karen, theory was transformational, as she said it has "shaped the ways I orient myself toward my classroom." Lajoie (2003) and Hatano and Oura (2003) contended that adaptive expertise is transformational, as it involves changes in socioemotional variables such as learner self-confidence, interest, and values. Most of the experienced teachers differed from inexperienced teachers in these transformational elements.

Research on conceptualization of knowledge may speak to this distinction between experience and inexperience. Access to one's own teaching context may also amplify this distinction. For instance, while participants who take classes like "Strategies for Teaching Adults" may learn the procedural rules for strategies, this strategic competence is superficial (Matz, 1980) and may be a step-by-step understanding. Those in the field, however, develop deeper level understanding when they take these courses, as they are planning for the context of their ABE teaching, not a graduate level course (Davis, 1983). As such, their planning involves conceptual knowledge.

At an international level, courses in foundations in teaching are integral to the development of the conceptual knowledge required for adaptive expertise. For example, Ireland has adopted certain orientations toward learning that is emphasized in teacher training, such as the learner-centered approach. The adoption of this practice is supported by the claim that "teacher training in the adult basic education field differs significantly from traditional teacher training for adults teaching children in that the role

of the learner is quite different" (Murphy, 2007, p. 11). Karen reiterated this in her discussion of authentic materials and realia, but she had the time to reflect, discuss, implement, and receive feedback while working in the field, as evidenced by Dr. Park's visit to her class.

As such, there is a necessity of foundations of practice in licensure coursework if it accompanies reflection, discussion, observation, and explicit feedback. Teachers coming from a K-12 background have a basic toolkit that inexperienced teachers cited as lacking, so foundational courses involving theory had more meaning for them. Transformation of knowledge acquired from informal, nonformal or other formal contexts seemed to require an explicit connection between theory and the teachers' current teaching context, with particular attention to who adult learners are and what they need.

Expertise through engagement in research-based practices: new and innovative

Through research, explicit instruction in how to teach literacy as well as how to negotiate those skills in a variety of settings is necessary for the development of expertise. All participants needed an opportunity to apply the practices, reflect, and return to their original plans for revisions. Both procedural and conceptual knowledge need to be negotiated for successful application in the field across multiple contexts. However, experienced teachers who may have encountered the research in other forms of professional development indicated that while they had the procedural knowledge of some of these methods, they did not have the explicit feedback on successful

implementation or an extended, facilitated discussion on research that supports it to develop the conceptual understanding required for adaptive expertise.

It was only through engagement in critical reflection about research-based practices with faculty and peers that a more conceptual understanding of one's teaching context and practice developed. Evidence of critical reflection, in which one of the purposes is to "question assumptions and practices that seem to make our teaching lives easier, but actually work against our own best long-term interests" (Brookfield, 1995, p. 8) was present for Roger, in which he re envisioned methods of literacy instruction for young adults via discussion research on methods for adult learners. Questioning of the assumption that he could not use a method designed for adults with his young adult learners occurred during discussion with his peers in online discussions, in which others' experiences teaching in different contexts provided new possibilities for use of certain methods. For example, his colleagues' experiences with group and individual learning coupled with study of research methods led Roger to discover that he could emphasize student control over learning with his young adults, challenging a previously held assumption and deepening his understanding of the use of methods across teaching contexts.

Experienced teachers learned how to consume the conceptual knowledge provided by research and received guidance for how to apply findings to many contexts through discussion with peers and faculty. The discussion assignments were frequently mentioned as facilitating a more concrete understanding of broad issues that were difficult to comprehend or use in practice. For example, Kate said that these discussion

assignments allowed her to consider "ways to take broad ideas that have been done by other people" and apply it to her teaching context, supporting her tendency to "try new things." It was imperative that participants learn how to negotiate meaning of these broad ideas in the discussion forum in order for application in practice to occur. Conrad and Donaldson (2011) argued that this kind of learning in an online environment can only be facilitated through "a high volume of meaningful communication, a deeper level of understanding, and the application of knowledge to real-life situations" (p. 27) in a way that engages both the student and the instructor. Interactivity among course participants and instructors facilitated a high level of engagement and deepened conceptual knowledge.

Similarly, participants could regard challenging issues occurring in multiple teaching contexts with having potential solutions as they negotiated meaning of research in course discussions. At times, participants discovered alternatives to current approaches, such as Roger in his teaching of young adults, while others were able to identify effective practices currently in place. The discussions of research allowed others like Joy to confirm effective practices, such as the principles of Universal Design for Learning, in ways that "support...teaching instincts." She was not aware that she was actively implementing research-based practices in her new teaching conditions as she was participating in discussions when she said, "and so when we were talking about placement and…universal design…it's at a time when I'm reading it, I get it, and I'm using it." The active reflection required to connect what she wanted to learn about (placement), to what she was learning (UDL principles), to what she was already doing in

her new teaching conditions is indicative of adaptive expertise, in which the teacher must explore meaning and reflect on past and current experience to apply ideas flexibly (Hatano & Oura, 2003). Successfully understanding and applying research-based practices was due in part to the way in which online discussions employed principles of adult learning.

Engagement in research-based practices via online discussions was supported by adult learning principles. Experienced teachers and, arguably, some inexperienced teachers developed expertise through transformative learning (Mezirow, 2000) and self-directed learning (Merriam, 2001) via participation in online discussions. Online forums provided a supportive and affirming environment required for transformational learning (King, 2004; Beavers, 2009). Beavers (2009) argued that when the supportive learning environment is in place, "professional development must strive to help teachers learn to talk about their practices and experiences" (p. 28), which can then be generalized into concepts applicable to the contexts of teachers (Riley & Roach, 2006). The goal of developing teachers "continually experimenting with new methods and ideas to create the best learning environment for their students" (Beavers, 2009, p. 28) may be met when the appropriate environment and connection of multiple experiences that can be generalized are established. It should be noted that each experienced teacher also possessed characteristics of successful self-directed learners in which they were interested in the topic and were "active [participants] in a learning activity that is cooperative in nature" (Conti, 1989, p. 5).

Exploration and critical reflection in a cooperative learning environment was required to either question or confirm prior practices for experienced teachers engaging in

research-based practices. Participants were able to integrate new ideas for practices by adapting new concepts to their respective practice, requiring a degree of flexibility given different teaching contexts. As opposed to some inexperienced ABE teachers, experienced teachers have an immediate context to apply new concepts and return to the forum to discuss the experience, thereby completing the exploration and reflection indicative of adaptive expertise. The conceptual knowledge required for adaptive expertise became more concrete and applicable for these teachers. Having expert models and immediate feedback also contributed to the reflection process and adaptation of new ways of teaching.

Expertise through modeling as a teaching strategy: doing.

Experienced teachers developed deep conceptual knowledge, but there was little evidence of application given few avenues to model best practices in the field. Those experienced teachers from early iterations of the program were able to see in-person demonstrations of methods as well as visits from faculty members to receive feedback on their teaching. The approaches modeled were supported by theory and research in in-person adult education classes and, in some cases monitored in the field. Thus, effective models, theory, and research were connected to practice for some experienced teachers, deepening procedural and conceptual knowledge.

Modeling and observations in the field enabled experienced teachers to activate practical knowledge in connection with new concepts in practice. Follow-up in the field was a critical component in facilitating connection to these concepts. For example, watching demonstrations in the “Strategies for Teaching Adults” course, having a

demonstration done by an expert in her classroom, being observed by the expert, and debriefing the experience solidified and built upon what Karen was already doing. This format stands in stark contrast to the presenter or lecture style that does not support multiple learning styles (Beaver, 2009). The option to have active involvement of program faculty facilitated a deep understanding of methods.

Experienced teachers also developed a deeper understanding of what it means to be an adult educator through effective models and observation. This is apparent through comments about how modeling and observation "transformed the way I think" about ABE. Key learnings from models included "different ways to work with adult learners, [including being] respectful, making it relevant to their learning and their lives, having students persist, [and] challenges...with learning disabilities and such." Helen imparts this to her volunteers in the hope of helping them develop adaptive expertise in adult learning contexts, as evidenced by her statement that she wants them to "[find] creative ways for students to develop their critical thinking skills." Modeling best practices for volunteers is a way in which experienced teachers demonstrated understanding of who they teach.

An understanding of how adults learn appears to support development of adaptive expertise in teachers. Beaver (2009) argued that "effectively educating teachers requires actively viewing adults as unique learners" (p. 28), one of which is to "provide options and alternatives to support different learning styles" (p. 28). If modeled effectively for teachers through demonstrations, observations, and feedback, they may be able to implement the same model in practice or impart the knowledge to volunteers and assistants, as in the case of Helen.

Modeling that activates practical knowledge in connection with new concepts and is supported by feedback was a limited, but effective strategy for experienced teachers in early iterations of the ABE licensure program. Using modeling as a teaching strategy allowed experienced teachers to tweak what they were doing to provide more effective instruction. Additionally, modeling that supported principles of adult learning deepened understanding of how adults learn best and encouraged teachers to act as a model for classroom assistants. Principles of adult learning underpinned the design of online learning for participants.

Adaptive Expertise is Developed through Engagement in a Community of Practice via Collaborative Program Components

Engagement with colleagues in a community of learning was critical to the development of enhanced understanding of the field, the ABE community, and of the applicability of certain methods for most ABE teachers according the interviews. Teachers expressed a sense of solidarity when they were able to see multiple perspectives. These perspectives of knowledge derived from varied life and work experience also allowed them to see how content could be modeled and make decisions about what to implement and expect from their own teaching contexts.

Experienced teachers developed a relational understanding of their teaching context to those of their colleagues, supporting the generalization of concepts and suggesting adaptive expertise. Inexperienced teachers, on the other hand, developed procedural and conceptual knowledge through an understanding of what, how and why of instructional choices via online discussion, suggesting routine expertise. Field

components may have facilitated adaptive expertise for some inexperienced teachers, but a sense of full immersion in the field while learning was lacking. All participants, however, developed an understanding of methods through problem-solving with peers in a collaborative environment.

Active participation in online discussions.

The finding that teachers' learning increases through participation in a community of practice is well-established in the educational literature. Those focusing on development of teachers note interpersonal relationships where there is identification with the common goal of developing expertise as a facilitator of effective learning communities (Grossman, Wineburg, & Woolworth, 2000; Wenger, McDermott, and Snyder, 2002). Participants frequently made statements about the importance of these relationships to their learning through statements such as "it was refreshing to hear different points of view," "different vantage points," and "it was validating for me." A level of comfort online was established among participants who found similarities between disparate teaching contexts each time they logged on to the course site. Borg (2012) discovered a similar phenomenon, in which frequent discussions and opportunities to problem-solve together fostered lasting relationships built on a common interest.

The participants in this study also discussed or demonstrated the ability to adapt to changing work environments through simultaneous participation in online courses and fieldwork. Research in France extends this by connecting the online learning environment to the field, and to policy. The French have made efforts to create informed practitioners through discussion about teaching in multiple contexts, which have been a

successful way to address standards and various forms of expertise. For example, Maroun (2007) argued that, in France, a permanent forum established to share practice and experiences and mechanisms of operation in different settings promote the most effective practices in specific contexts as well as discussion of how professionalization efforts can make these practices more effective. Participants in these discussions are also involved in literacy policy efforts in Europe, an extension of what the participants of this study experienced. Having teachers "facilitate the learning activities rather than having them organized by administrators was identified by Beaver (2009) as effective professional development for teachers. As such, there is a direct line of communication from practitioner to policy, which in turn, informs professionalization processes.

Engagement in field components.

The research on adaptive expertise elucidates the participants' experiences in the online learning environment in conjunction with field components. In isolation, the online discussions facilitate superficial procedural knowledge and a vague understanding of concepts because participants only discuss content, methods to address the content, and why certain methods would work in other contexts as opposed to others without an immediate context to apply what they discussed. This suggests that online components facilitate routine expertise when there is not a field component to experience the situation change required for adaptive expertise (Hatano, 1988, 2003). In conjunction with fieldwork, however, inexperienced participants cited knowing to use certain methods (Mason & Spence 1999).

For those who felt they were not fully immersed via these components and only

partially participating due to their role as a volunteer, such as Doug, who inquired about what he might have learned had he been immersed in the field, research on informal learning may clarify their contradictory experience. Sawchuk (2008), an informal learning theorist conceded that work is usually considered to be what people do for an income. This was present among participants who characterized volunteer work as "just volunteering," or they were "just a classroom assistant." He and other researchers in the area of informal learning, such as Livingstone (2005), Eichler (2005), Schugurensky and Mundel (2005), have argued that there is social capital in volunteer work and, in the work of Eichler (2005) and Schugurensky and Mundel (2005) in particular, there is overlap between skills of a paid position and those of the volunteer position, which some inexperienced participants discovered through their online discussions, connecting their experiences with the past and current experiences of their peers. However, this informal learning was insufficient, as they lacked both the procedural and conceptual knowledge of many of their experienced peers. This was evidenced by frequent claims that their position was different from that of the lead teacher, and that "they cannot contribute" as much as they preferred to in the online discussions due to their volunteer status. Informal learning, therefore, is only a small part of developing expertise, especially when the inexperienced teacher is a volunteer or classroom assistant.

Informal, nonformal, and formal learning environments overlapped and interacted to develop different levels of knowledge for all participants. Eraut (2004) outlined ways in which, on an individual basis, informal learning can occur much in the way it did for those participating in a nonformal context of online learning delivering formal knowledge. Participants engaged in deliberative learning, in which, in an online

environment (a non-formal context), they discussed and reviewed past actions and experiences (from informal work contexts), engaged in decision making about methods based on past experience and new knowledge from colleagues (from formal and informal context), and planned for future events in the field (an informal context). As a result, there is an integration of past and current experiences with formal knowledge, and an overlap between informal, nonformal, and formal contexts in the engagement with research and the online discussion format and subsequent implementation in the field, which mimics the cross-fertilization of informal learning theory (Sawchuk, 2008).

Engaging in a community of practice as an experienced or inexperienced teacher fostered different kinds of expertise depending on the level of experience in the field for each participant. Online discussions became platforms for problem-solving as participants discussed concepts, experiences, and alternatives based on new information. However, those without a concurrent field experience could only contribute a small amount of background knowledge, limiting the use of course participant experiences as learning opportunities. A community of practice also forms when knowledge is collectively built through an overlap of informal, nonformal, and formally derived knowledge. Those beginning with minimal informally derived knowledge may only have a limited understanding of how to navigate organizational systems in ABE.

Expertise is Developed through Coursework in Organizational Systems in ABE

Participants had different experiences with regard to understanding organizational systems in ABE. Inexperienced teachers in recent iterations of the program spoke about being inundated with resources, so their focus was on navigating systems in order to use

each resource appropriately. Most experienced teachers in early iterations of the program, on the other hand, had to search for sources in the field to address working conditions, despite their conceptual understanding of problems they may encounter as teachers who are a part of a larger organization. It is unclear if the teaching setting or individual ability contributed to organizational change.

Navigating systems.

When considering modes of developing professional competence, the performance model acknowledges the professional's developmental, social, and environmental considerations, requiring them to self-assess about more than the method they are delivering to students, bringing "more than job functions into view" (Nowlen, 1988, p. 86), accounting for understanding multiple systems (e.g., organizational, political, etc.). Hatano and Oura (2003) also account for the importance of understanding these systems with regard to developing expertise in that "learning is not separate from socially significant problems and performing tasks" (p. 26). Inexperienced teachers had the opportunity to see and consider effective models of methods, but could not contemplate development beyond job functions. For instance, Mary remarked on an overabundance of resources that she had to parse through to make sense of her job as a teacher.

Inexperienced teachers also expressed confusion about the ABE programming, including where and what is delivered. For example, while Erin learned about different kinds of programs for adult learners in the "Designing the Adult Education Program" course, the sheer diversity of learners one program served and the multiple locations it

delivered its services presented a multi-faceted view of an adult learning program that was "so broad" in the programming it offered and the populations it serves. Johnson et al.'s (2010) study presented findings about ESL programming taught in at least fourteen different program areas, revealing that a large portion of ESL is offered in ABE programs. The study also revealed multiple professional development needs to address different skill needs and learning strategies. Inexperienced teachers must learn to use resources to navigate these complex systems.

Even with a conceptual understanding of professional needs, many of experienced participants expressed increasing awareness of how they are not treated as professionals, despite their credential. The issue, whether it be the need to navigate systems or fight against them, was at the forefront of their comments. Comments such as "lack of professionalism" and "raise the level of professionalism" were common, especially referring to pay and the disconnect between the entity running their organization and the needs of the staff. This corroborates Johnson et al.'s (2010) depiction of the working conditions of Minnesota's ESL teachers, in which "lack of paid prep-time or lack of time due to the part-time nature of their ABE positions" (p. 35) makes planning for and delivering high quality instruction a constant concern.

Combatting systems.

Although the credentialing program provided foundations in program development and adult learning and development, it only required a course on organizational systems as a part of the Master's degree that some received concurrently with the license. As such, only one participant was able to enact change to improve

working conditions. Simply being able to navigate systems with a conceptual understanding may mean continually battling systems. Moreover, adaptive expertise may not adequately explain the skills needed to solve systemic issues.

Only one participant, Karen, who participated in an M.Ed course covering organizational systems, was able to apply that knowledge to improve her program. There are most likely many variables for her success, including the fact that she works at a CBO. Whereas Helen described the school district like "a big dinosaur in a small room that needs to turn around," but cannot do so without breaking down walls, those working at CBOs, like Karen, may have the freedom and flexibility to tear down a few walls given their multiple roles.

Karen cites critical skills from a course on organizational development that enabled her to form needed relationships. While the literature on adaptive expertise might explain her understanding of why a tactic did not work, there was no evidence of that in her comments. Instead, research in the area of work-based learning may explain the skills she applied. One possible theory is cultural-historical activity theory, which is explained by the following:

> "cultural-historical activity theory tries to account for ...interactions with an expansive view of learning, defined as change of a particular activity system…[and] learning occurs as a cycle of questioning something in this activity system, analyzing its causes, modeling a new explanation or solution, implementing this model in the system, reflecting on it, and consolidating it" (Fenwick, 2006, p. 292)

Problem-solving is not necessarily the goal, but identification of a key issue and negotiation of "what can be tolerated within the politics of the system" (Fenwick, 2006, p. 293).

Where professionalization opportunities have been scant, instructors have had to devise approaches without formal teacher training, much like the instructors with significant teaching experience who were also pre-service. Karen and Kate were such examples, both working for CBOs who hired them without licenses. A systemic issue, this revealed some gaps that formal education could potentially fill when experience is the only knowledge shared. The Netherlands is an example of this phenomenon, as they have had to develop sound practices through "piecemeal and divergent approaches to helping youth and adults" (Hermans & Tijssen, 2007, p. 9). The country is attempting to capitalize on the knowledge of former teachers who have left the field or retired, as adult literacy instruction is not viewed as a legitimate field of study.

Participants also expressed a need to raising awareness of the ABE field to administrators and practitioners in order to address their major concerns in the systems in which they teach. Helen, for example, was adamant that the K-12 field learn about what adult educators do, who they serve, and why in order to raise the status of the ABE field in the school district. This concern for distinction of ABE from K-12 was consistent with Sabatini, Ginsburg, and Russell's (2002) findings arguing that credentialing programs, standards, and professional development must be acknowledged as "valid and distinct to ABE and is recognized or affirmed by school boards, employers, and the local community" (p. 3). Raising awareness may ensure that all aspects of the professionalization process address the unique needs of ABE teachers.

Developing the ability to address the concerns of ABE professionals working in a complex system may extend beyond a credentialing program, as it is still unclear where and how participants develop the expertise to address working conditions of their ABE

organization. Inexperienced teachers received many resources to the point of overwhelming them, and experienced teachers must learn how to form relationships in the field to begin to understand the system and enact change. While the course on organizational systems was helpful for one participant, she needed to reflect on what she learned as the problems were occurring in her organization to make the connection between concepts and her context. Furthermore, advocacy for teachers as skilled professionals and the field as an entity with needs distinct from K-12 classrooms may be needed.

Recommendations for Further Research

There are a few concepts and theories that explain expertise development in this credentialing program. Adaptive expertise does account for flexibility of knowledge gained in different learning environments and applied across multiple settings as experienced by the study's participants. Those in CBOs who could teach without a license were more aware of systemic issues, but the ability to address these problems was limited. As such, adaptive expertise may not account for the non-linear nature of problems that are systemic in ABE, meaning it is not as simple as finding a solution to solve the problem.

Further research employing different methodologies and methods may be needed. In particular, theory generation (i.e., grounded theory) may develop a more enriched conceptualization of how expertise develops through credentialing programs and professional development formats. Additionally, it may be helpful to compare cases to learn about expertise development across multiple methods of professionalization,

including licensure programs or professional development sessions. The following areas could be explored with two designs in mind:

1) theory of problem solving strategies among ABE teachers
2) how other credentialing programs and professional development outlets use online learning to develop skills in different areas
3) how teachers in licensure programs become effective consumers of research versus how study circles or other professional development address the issue
4) Observation as teaching methods in licensure programs versus how study circles or other professional development address the issue

Since adaptive expertise fell short in explaining problem-solving strategies at the organizational level, the first recommendation suggests that grounded theory methodology may offer insights into how problem-solving occurs among a group of ABE teachers working in diverse settings. In this kind of study, problem-solving would be the aspect of educational practice under investigation and a substantive theory to explain how it develops may emerge (Glaser & Strauss, 1967; Strauss, 1987).

The last three recommendations may be addressed via a comparative case study to compare utility of program components in the development of skills and knowledge required for expertise. Comparative case studies can offer more information about expertise development, or specific aspects of its development, as "the more cases included in a study, and the greater the variation across the cases, the more compelling the interpretation is likely to be" (Merriam, 1998, p. 40) Since this was a unique program, it may be difficult to conduct a comparison; however, discovering similarities and key differences may offer institutions with insights into effective programming for

prospective and current teachers.

Within the two frameworks (grounded theory and comparative case study), a research method in which the observer is a participant could be an effective method of data collection. When the observer is a participant, “the researcher’s observer activities are known to the group [and] participation in the group is definitely secondary to the role of information gatherer” (Merriam, 1998, p. 101). The observations could easily take place during a study circle or other professional development event. Additionally, as the observer “[interacts] closely enough with members to establish an insider’s identity without participating in those activities constituting the core of group membership” (Adler & Adler, 1994, p. 380), the researcher could observe the teacher in action to gain insights into the application of new skills and concepts as they occur, which would add to the extant literature on skill and knowledge development of ABE teachers.

The above recommendations offer alternatives to the methodology and methods of this study to research questions that have emerged as a result of the findings. Recommendations for practitioners discuss the components of an ABE licensure program most effective at developing expertise in ABE practitioners as well as where professional development can maximize and extend the skills and knowledge developed in licensure programs.

Recommendations to Practitioners

There are seven recommendations for practitioners that follow from the major conclusions addressed in this study. The first five recommendations are for administrators and faculty offering ABE licensure programs. The last two offer practical

considerations for professional development.

First, explicit instruction of methods must accompany the theoretical. Teachers are entering the program with such varied experience and coming from different settings that one necessitates the other. ABE content areas and effective classroom management strategies that would be useful for all teachers should be offered in addition to foundations in adult learning, the latter of which would benefit those coming from K-12 contexts. Experienced teachers were able to demonstrate expertise on more occasions than inexperienced teachers in this study. The majority of the latter would receive the essential toolkit (such as lesson planning and how to teach literacy), while experienced teachers could receive updates on research-based methods. Both groups would also receive the requisite theoretical foundations that contributed to enhanced understanding of who adult learners are, what they need, and why.

Second, and related to the first recommendation, credentialing programs should define parameters for what constitutes experience. Acknowledgement of volunteer experience as hours in the field does assume that the instructor has requisite procedural knowledge. However, some participants in this study who were volunteers prior to enrollment did not indicate this, and instead sought out the fundamentals of teaching and more of an immersive experience in the field. This means development of an extended field component.

Third, inexperienced participants in licensure programs must be offered more opportunities to try approaches and return to a course to reflect on their experience. Online discussion is the beginning of this, so new courses may need to be developed in

which there is a service learning component to facilitate exploration of material, in which participants discuss, use, reflect upon, and return for further discussion.

Fourth, program administrators and faculty should have ongoing contact with the field. Whether that be through regular observation, site visits, or updated videos of them practicing, program faculty need to be constantly aware of the issues facing ABE teachers in everyday practice. This can inform the content of courses and ensure that everything is topical and aligns with the movement of the field.

Fifth, given the control of adult education by community education in Minnesota, connecting with the K-12 community may help raise awareness of the level of professional skill of ABE teachers and perhaps ensure pay and benefits commensurate with experience and credentialing. This means universities delivering ABE programs must be in constant conversation with these institutions about the skills they can expect a licensure candidate to gain upon entry into the field and the type of professional development will receive in a school district (i.e., adult education-oriented versus K-12-oriented).

Sixth, professional development should be differentiated to account for ABE teaching context. While online discussions in a credentialing facilitated understanding of common issues facing ABE organizations around the state as well as concepts that could be applied across contexts, professional development can step in to provide resources unique to the needs of specific contexts. This follows from Johnson et al.'s (2010) contention that a main professional development priority in Minnesota is to address multi-level settings and its wide range of learner skill levels and abilities, languages, and educational levels. ATLAS' Low Literacy Study Circle is also an example of this

differentiation. Grouping professional development participants by level taught may also be a way to target specific development, yet use teachers' variety of experiences as learning opportunities, as recommended by Beaver (2009).

Seventh, if professional development includes research to apply to practice, practitioners must be taught how to consume this research. If teachers do not have background knowledge or experience to draw upon, consuming research for practical application may be overwhelming. In this study, some inexperienced participants regarded some concepts as too vague or broad to apply. Beaver's (2009) recommendation that topics should be "practical and applicable rather than theoretical and philosophical" (p. 28) could be followed if there is an explicit connection of broad concepts to teaching practice made by the facilitator or instructor. This might mean reducing the breadth of information to be consumed and exploring a few concepts in depth. Additionally, using the research could involve focusing attention to problems that occur in practice and encouraging "dialogue among peers geared towards problem-solving" (Beaver, 2009, p. 28) to make concepts more concrete.

These recommendations involve practical applications of successful program components to develop expertise. They also suggest a few ways in which professional development can continue the education of ABE teachers. The next section addresses some of the methodological limitations of this study.

Limitations

One of the limitations of this study is that there are few participants from a unique program. The purpose and methodology of the study required an in-depth examination of

how a unique licensure program develops expertise of participants with diverse experience; however, it is difficult to compare programs when few exist. Until that undertaking is completed, readers will need to consider the ways in which ABE is delivered in Minnesota compared to their respective contexts.

A second, similar limitation of the study is that it examined the means by which expertise was developed for licensure program participants, which has no theory to support it. Given this fact, future studies employing a grounded theory approach may be needed. A grounded theory approach could develop theory in this under-researched area and make steps toward developing a theory that explains what kind of expertise practitioners gain, how it develops through the process of professionalization, and how it is used in the field.

A third limitation is the factor of age in online learning. My sample included participants in their late fifties and mid-sixties. Only two of them mentioned the steep learning curve of online learning, and the oldest participant, who completed the program in 2005, said it would not be an issue for her now. However, this does not mean that lack of familiarity with online learning management systems are not a challenge for older enrollees. Further study of this issue may be required.

A fourth limitation is the role of the researcher. As the primary instrument for data collection and analysis, multiple measures (i.e., preliminary interview, document analysis and peer checking) were taken to ensure internal validity; however, more of an effort to triangulate data, such as the addition of observation, would have been helpful. It is also my interpretation of data that the reader sees. While assumptions, beliefs and values were identified in my preliminary interview, it is difficult to disentangle those

from my interpretations of results.

Summary

The conclusions of this study articulate the differences between participants in terms of their teaching experience, the program components from which they benefited, and coursework that has the potential to address larger issues facing teachers. It was determined that inexperienced and experienced teachers developed differing levels of expertise based on their respective professional needs. Those without practical experience sought a basic toolkit to develop routine expertise, while experienced teachers were interested in ways to grow their skills and creatively apply them to develop adaptive expertise. However, all participants grew with regard to the dialogue and relationships established via online discussion. Additionally, access to the field with concurrent participation in online discussions facilitated reflection and, after consideration of alternatives, some revision of prior behavior.

Further research is needed to fully understand how ABE teachers develop expertise through different aspects of the professionalization process. A grounded theory approach could provide a substantive theory about the ways in which ABE teachers problem-solve at the organizational level, an area not completely addressed by adaptive expertise in this study. Additionally, inclusion of professional development opportunities with a credentialing program in a comparative case study may expand the sample as well as the diversity of perspectives that could be offered. These perspectives could be gathered in-field via an observer as participant method.

Recommendations for practitioners consider the components of the program, the

role of faculty and administration, and how professional development can extend the skills and knowledge built in the licensure program to meet additional needs. The emphasis in recent programming has been less global given emphasis on standards, but conceptual knowledge remains an integral part of successful application of practices. Both must be present, but an explicit connection must be made between concepts and practice. Faculty and administrators of the program must also be connected to the field and the systems delivering ABE services to advocate for teachers as professionals in these systems. Professional development may be able to provide differentiation when systems are too varied as well as continued direction on how to apply research to practice.

Finally, the limitations of this study are methodological in nature. The case itself, sample size and composition, the lack of theory, and the role of the researcher limited the understanding of how expertise develops in ABE practitioners in Minnesota. What has been determined is that expertise, routine or adaptive, can emerge for both inexperienced and experienced teachers in an ABE licensure program. When delivered with active participation from all ABE stakeholders, diverse teacher candidates can thrive in a credentialing program.

References

ABE Network News. (1979). Retrieved from University of Minnesota. Minneapolis: ABE Network News.

ABE Network News. (1978). Retrieved from University of Minnesota. Minneapolis: ABE Network News.

Adler, P.A., and Adler, P. (1994). Observational techniques. In N. K. Denzin and Y.S. Lincoln (Eds.), *Handbook of Qualitative Research.* Thousand Oaks, CA: Sage.

Adult Basic Education Teaching and Learning Advancement System (ATLAS). (2009). *2009 ABE Practitioner Survey.* Retrieved from http://www.hamline.edu/education/esl/atlas/datasurveys/MN_ABE_Practitioners.pdf

Annells, M. (1996). Grounded theory method: Philosophical perspectives, paradigm of inquiry, and postmodernism. *Qualitative Health Research, 6*(3), 379-393. Retrieved from http://qhr.sagepub.com/

Appleton, E., Farina, S., Holzer, T., Kotelawala, U., & Trushkowsky, M. (2017). Problem posing and problem solving in a math teacher's circle. *Journal of Research and Practice for Adult Literacy, Secondary, and Basic Education, 6*(1), 33-39. Retrieved from https://www.coabe.org/

ATLAS. (2016). ACES (Academic, Career, and Employability Skills). Retrieved from http://atlasabe.org/professional/transitions

Barnett, S. M., & Koslowski, B. (2002). Adaptive expertise: Effects of type of experience and the level of theoretical understanding it generates. *Thinking and Reasoning, 8*(4), 237-267. doi: 10.1080/13546780244000088

Baroody, A. J., Feil, Y., & Johnson, A. R. (2007). An alternative reconceptualization of procedural and conceptual knowledge. *Journal for Research in Mathematics*

Education, 38(2), 115-131. Retrieved from http://www.jstor.org/stable/30034952

Beavers, A. (2009). Teachers as learners: Implications of adult education for professional development. *Journal of College Teaching & Learning, 6*(7), 25-30. Retrieved from https://www.cluteinstitute.com/ojs/index.php/TLC/index

Behrman, E.H. (2002). Community-based literacy learning. *Reading, 36*(1), 36-42. Retrieved from http://www.wiley.com.ezp1.lib.umn.edu/WileyCDA/

Belzer, A., & Darkenwald-DeCola, J. (2014). *A national scan of entry qualifications and early and ongoing professional development requirements and offerings for adult basic education practitioners.* Retrieved from National Adult Education Professional Development Consortium website: http://www.naepdc.org/

Borg, T. (2011). The evolution of a teacher community of practice: Identifying facilitating and constraining factors. *Studies in Continuing Education, 34*(3), 310-317. Retrieved from http://dx.doi.org/10.1080/0158037X.2011.622717

Brennan, B. (1997). Reconceptualizing nonformal education. *International Journal of Lifelong Education, 16*(3), 185-200. Retrieved from http://www.tandfonline.com/toc/tled20/current#.UwE81_ldWSp

Brookfield, S. D. (1986). *Understanding and facilitating adult learning.* San Francisco, CA: Jossey-Bass.

Brophy, S., Hodge, L., & Bransford, J. (2004, October). *Adaptive expertise: Beyond apply academic knowledge.* Paper presented at the Frontiers in Education Conference, Savannah, GA.

Brown, A. L., Ash, D., Rutherford, M., Nakagawa, K., Gordon, A., & Campione, J. C. (1993). Distributed expertise in the classroom. In G. Salomon (Ed.), *Distributed cognition* (pp. 188-228). New York: Cambridge University Press.

Brown, A. L. (1989). Analogical learning and transfer. What develops? In S. Vosniadou

& A. Ortony (Eds.), *Similarity and analogical reasoning* (pp. 369-412). Cambridge, England: Cambridge University Press.

Brownell, W. A. (1935). Psychological considerations in the learning and the teaching of arithmetic. In D. W. Reeve (Ed.), *The teaching of arithmetic* (Tenth yearbook of the National Council of Teachers of Mathematics, pp. 1-50). New York: Bureau Publications, Teachers College, Columbia University.

Cameron, C. R. (1981). Certification should be established. In W. Burton & B. Kreitlow (Eds.), *Examining controversies in adult education* (pp. 73-83). San Francisco, CA: Jossey-Bass.

Center for Adult English Language Acquisition (CAELA) Network. (October 2008). *Framework for Quality Professional Development for Practitioners Working with Adult English Language Learners.* Washington, D.C.: Center for Applied Linguistics. Retrieved from http://www.cal.org/caelanetwork/profdev/framework/index.html

Cervero, R. M. (1992). Adult and continuing education should strive for professionalization. In M. W. Galbraith & B. R. Sisco (Eds.), *Confronting controversies in challenging times: A call for action* (pp. 45-50). San Francisco, CA: Jossey-Bass.

Cervero, R. M. (1989). Becoming more effective in everyday practice. *New Directions for adults and continuing education,* (44), 107-113. Retrieved from https://doi.org/10.1002/ace.36719894414

Chi, M. T. H., Glaser, R., & Farr, M. J. (1988). *The nature of expertise.* Hillsdale, NJ: Erlbaum.

Chi, M. T. H., Feltovich, P. J., & Glaser R. (1981). Categorization and representation of physics problems by experts and novices. *Cognitive Science, 5*, 121-125. Retrieved from https://onlinelibrary.wiley.com/journal/15516709

Collins, H. M., & Evans, R. (2002). The third wave of science studies: Studies of expertise and experience. *Social Studies of Science, 32*, 235-296. Retrieved from http://sss.sagepub.com/

Collins, M. (1992). Adult and continuing education should resist further professionalization. In M. W. Galbraith & B. R. Sisco (Eds.), *Confronting controversies in challenging times: A call for action* (pp. 37-43). San Francisco, CA: Jossey-Bass.

Conrad, R. M., & Donaldson, J. A. (2011). *Engaging the online learner.* San Francisco: Jossey-Bass.

Conti, G. J., (1989). Assessing teaching style in continuing education. In E. Hayes (Ed.), *Effective Teaching Styles* (pp. 3-16). San Francisco: Jossey-Bass.

Coombs, P. H. (1985). *The world crisis in education: A view from the eighties.* New York: Oxford University Press.

Copeland, H. G. (Ed.). (1993, June). *Minnesota association for continuing adult education historical record: 1975-1992.* Minneapolis, MN: Minnesota Association for Continuing Adult Education.

Cranney, A. G. (1987). The improving professionalization of postsecondary developmental reading. *Journal of Reading, 30*(8), 690-700. Retrieved from http://www.jstor.org/stable/40029767

Cranton, P. (1996). *Professional development as transformational learning.* San Francisco: Jossey-Bass.

Cranton, P. (1994). *Understanding and promoting transformative learning: A guide for educators of adults.* San Francisco: Jossey-Bass.

Cranton, P., & King, K. (2003). Transformative learning as a professional goal. *New Directions for Adult and Continuing Education,* 98, 31-37.

Creswell, J. W. (1998). *Qualitative inquiry and research design: Choosing among five traditions.* Thousand Oaks, CA: Sage.

Davis, R. B. (1983). Complex mathematical cognition. In H.P. Ginsburg (Ed.), *The development of mathematical thinking* (pp. 253-290). New York: Academic Press.

Dillman, D. A., Smyth, J. D., & Christian, L. M. (2009). *Internet, mail, and mixed mode surveys: The tailored design method* (3rd ed.). Hoboken, NJ: John Wiley & Sons, Inc.

Dufresne, R. J., Gerace, W. J., Hardiman, P. T., & Mestre, J. P. (1992). Constraining novices to perform expertlike problem analyses: Effects on schema acquisition. *Journal of the Learning Science, 2*(3), 307-331.

Evetts, J. (2003). The sociological analysis of professionalism: Occupational change in the modern world. *International Sociology, 18*, 395-415. Retrieved from http://iss.sagepub.com/

Fenwick, T. (2006). Toward enriched conceptions of work learning: Participation, expansion, and translation among individuals with/in activity. *Human Resource Development Review, 5*(3), 285-302. Retrieved from http://journals.sagepub.com/loi/hrd

Fernandez, R., Peyton, J., Kreeft, J., & Schaetzel, K. (2017). A survey of writing instruction in adult ESL programs: Are teaching practices meeting adult learner needs? *Journal of Research and Practice for Adult Literacy, Secondary, and Basic Education, 6*(2), 5-20. Retrieved from https://www.coabe.org/

Frank, M. (2017). *Where in the CCRS world are alphabetics and fluency?* Retrieved from http://atlasabe.org/resources/content-standards/ccrs-ela-standards

Freidson, E. (1970). *Profession of medicine.* New York, NY: Dodd, Mead.

Freidson, E. (1986). *Professional powers.* Chicago, Il: Chicago Press.

Freidson, E. (2001). *Professionalism: The third Logic.* Chicago, Il: Chicago Press.

Galbraith, M. W., & Gilley, J. W. (1985). An examination of professional certification. *Lifelong Learning: An Omnibus of Practice and Research, 9*(2), 12-15. Retrieved from http://catalog.hathitrust.org/Record/000073948

Galbraith, M. W., & Gilley, J. W. (1986). *Professional certification: Implications for adult education and HRD.* Washington, DC: Office of Educational Research and Improvement, U.S. Department of Education.

Gick, M. L., & Holyoak, K. J. (1983). Schema induction and analogical transfer. *Cognitive Psychology, 15*, 1–38.

Gilkey, M., Garcia, C. C., & Rush, C. (2011). Professionalization and the experience-based expert: Strengthening partnerships between health educators and community health workers. *Health Promotion Practice, 12*(2), 178-182. Retrieved from http://journals.sagepub.com/doi/abs/10.1177/1524839910394175

Graveline F. J. (2005). Indigenous learning. In L. M. English (Ed.), *International encyclopedia of adult education* (pp. 304-309). New York: Palgrave Macmillan.

Gray, E. M., & Tall, D. O. (1994). Duality, ambiguity, and flexibility: A “proceptual” view of simple arithmetic. *Journal for Research in Mathematics Education, 25*, 116-140. Retrieved from https://www.jstor.org/journal/jresematheduc

Grossman, P., Wineburg, S., & Woolworth, S. (2000). *What makes teacher community different from a gathering of teachers?* Washington: University of Washington.

Guba, E. G., & Lincoln, Y. S. (1998). Competing paradigms in qualitative research. In N. K. Denzin & Y. S. Lincoln (Eds.). *The landscape of qualitative research: Theories and issues* (pp.195-220). Thousand Oaks, CA: Sage.

Guba, E. G., & Lincoln, Y. S. (1994). Competing paradigms in qualitative research. In

N. K, Denzin & Y. S. Lincoln (Eds.), *Handbook of Qualitative Research.* Thousand Oaks, CA: Sage.

Hamilton, M., & Merrifield, J. (1999). Professionalization of teachers. In *Adult Learning and Literacy in the United Kingdom* (Vol. 1, ch. 7, pp. 1-57). Retrieved from http://www.ncsall.net/?id=520

Hanson, B. M., & Bryant, B. F. (2005). *Saint paul public schools adult basic education program; A history, 1965-2004.* Belle Plaine: EduCon Diversified, Inc.

Hatano, G. (1982). Cognitive consequences of practice in culture specific procedural skills. *The Quarterly Newsletter of the Laboratory of Comparative Human Cognition, 4*, 15-18.

Hatano, G., & Inagaki, K. (1992). Desituating cognition through the construction of conceptual knowledge. In P. Light & G. Butterworth (Eds.), *Context and cognition* (pp. 115-133). Hemel Hempstead UK: Harvester.

Hatcher, T. (2006). Democratizing the workplace through professionalization of human resource development. *International Journal of Training and Development, 10*(1), 67-82.

Henry, L. A. (2013). Literacy content knowledge expertise among adult education providers in Kentucky. *Journal of Research and Practice for Adult Literacy, Secondary, and Basic Education, 2*(1), 35-48. Retrieved from http://www.coabe.org/html/abeljournal.html

Hermans, L., & Tijssen, M. (2007). *Professional development in the field of literacy and basic education: State of the art in the Netherlands* (CINOP Report 229564-CP-1-2006-1-DE-GRUNDTVIG-G1). Retrieved from www.cinop.nl

Hiebert, J., & Carpenter, T. P. (1992). Learning and teaching with understanding. In D. A. Grouws (Ed.), *Handbook of research on mathematics teaching and learning* (pp. 65-97). New York: Macmillan.

Hiebert, J., & Lefevre, P. (1986). Conceptual and procedural knowledge in mathematics: An introductory analysis. In J. Hiebert (Ed.), *Conceptual and procedural knowledge: The case of mathematics* (pp. 1-27). Hillsdale, NJ: Erlbaum.

Hiebert, J., & Wearne, D. (1986). Procedures over concepts: The acquisition of decimal number knowledge. In J. Hiebert (Ed.), *Conceptual and procedural knowledge: The case of mathematics* (pp. 199-223). Hillsdale, NJ: Erlbaum.

Holyoak, K. J. (1981). Review of St. M. Kosslyn, *Image and mind.* (1980). *Journal of Mental Imagery, 5*, 199-204. Retrieved from https://publons.com/journal/23652/journal-of-mental-imagery

Husserl, E. (1911/80). *Filosofie als strenge wetenschap.* Amersterdam: Boom Meppel.

Illeris, K. (2004). *Adult education and adult learning.* Malabar, FL: Krieger.

Inverso, D. C., Kobrin, J., & Hashmi, S. (2017). Leveraging technology in adult education. *Journal of Research and Practice for Adult Literacy, Secondary, and Basic Education, 6*(2), 55-58. Retrieved from https://www.coabe.org/

James, W. B. (1981). Certification is unfeasible and unnecessary. In W. Burton & B. Kreitlow (Eds.), *Examining controversies in adult education* (pp. 84-95). San Francisco, CA: Jossey-Bass.

Johnson, P. E., Hassebrock, F., Duran, A. S., & Moller, J. H. (1982). Multimethod study of clinical judgment. *Organizational Behavior and Human Performance, 30*, 201-230. Retrieved from https://www.sciencedirect.com/journal/organizational-behavior-and-human-performance

Johnson, K., Marchwick, K., & Liden, A. (2010). Who are Minnesota's adult ESL practitioners? *MinneTESOL Journal, 27*, 18-42. Retrieved from www.minnewitesol.org

Kestner, S. (2002). New directions for professional development: Kentucky's

journey. *Focus on Basics D*, *5*, 23-28. Retrieved from http://www.ncsall.net/index.html@id=240.html

Klein, H. K., & Myers, M. D. (1999). A set of principles for conducting and evaluating interpretive field studies in information systems. *Management Information Systems Quarterly, 23*(1), 67-88. Retrieved from https://www.misq.org/

Knowles, M. S., Holton, E. F., & Swanson, R. A. (2011). An andragogical process model for learning. *The adult learner: The definitive classic in adult education and human resource development* (pp. 114-136). Oxford, UK: Elsevier Inc.

Lajoie, S. P. (2003). Transitions and trajectories for studies of expertise. *Educational Researcher, 32*(8), 21-25. Retrieved from http://journals.sagepub.com/home/edr

Leigh, J. T. (2014). The process of professionalisation: Exploring identities of child protection social workers. *Journal of Social Work, 14*(6), 625-644. doi: 10.1177/1468017313504380

Literacy Information and Communication System. (2017). About LINCS. Retrieved from https://lincs.ed.gov/about

Markowitz, L., & Tice, K. W. (2002). Paradoxes of professionalism: Parallel dilemmas in women's organizations in the americas. *Gender & Society, 16*(6), 941-958. Retrieved from http://journals.sagepub.com/doi/abs/10.1177/089124302237896

Maroun, E. (2007). *Professional development in the field of literacy and basic education* (CINOP Report 229564-CP-1-2006-1-DE-GRUNDTVIG-G1). Retrieved from www.cinop.nl

Marsick, V. J., & Watkins, K. E. (1990). *Informal and incidental learning.* London: Routledge.

Mason, J., & Spence, M. (1999). Beyond mere knowledge of mathematics. The importance of knowing-to act in the moment. *Educational Studies in*

Mathematics, 38, 135-161. Retrieved from https://link.springer.com/journal/10649

Matz, M. (1980). Towards a computational model of algebraic competence. *Journal of Mathematical Behavior, 3*, 93-166. Retrieved from www.sciencedirect.com/science/journal/07323123

McDonough, J. and McDonough, S., (1997). *Research methods for English language teachers.* London: Arnold.

McShane, S. (2005). *Applying research in reading instruction for adults: First steps for teachers.* Washington, DC: National Center for Family Literacy.

Merriam, S. B. (2001). Andragogy and self-directed learning: Pillars of adult learning theory. *New Directions for Adult and Continuing Education,* 89, 3-12.

Merriam, S. B. (1998). *Qualitative research and case study applications in education.* San Francisco: Jossey-Bass.

Merriam, S. B. (1982). Some thoughts on the relationship between theory and practice. In S. Merriam, (Ed.), *New Directions for Continuing Education: Linking philosophy and practice* (pp. 87-91). doi: 10.1002/ace.36719821511/pdf

Merriam, S. B., Caffarella, R. S., & Baumgartner, L. M. (2007). Learning environments and learning concepts. *Learning in adulthood* (pp. 27-52). San Francisco, CA: Jossey-Bass.

Mezirow, J.; and Associates. (2000). *Learning as transformation.* San Francisco: Jossey-Bass.

Miles, M. B., & Huberman, A. M. (1994). *Qualitative data analysis: An expanded source book* (2nd ed.). Thousand Oaks, CA: Sage.

Minnesota ABE Professional Development System. (2009). *Minnesota ABE professional development mission.* Retrieved from http://atlasabe.org/pd-system/mnabe-

professional-development-standards

Morgan, G., & Smircich, L. (1980). The case for qualitative research. *The Academy of Management Review, 5*(4), 491-500. Retrieved from http://amr.aom.org/

Morse, Janice M. (1994). Designing funded qualitative research. In Norman K. Denzin & Yvonna S. Lincoln (Eds.), *Handbook of qualitative research* (pp. 220-235). Thousand Oaks, CA: Sage.

Morse, J. M. (1989). Strategies for sampling. In J. M. Morse (Ed.), *Qualitative nursing research: A contemporary dialogue.* (pp. 117-131). Rockville, MD: Aspen Publishers, Inc.

Mott, V. W. (2000). The development of professional expertise in the workplace. *New Directions for Adult and Continuing Education,* (86), 23-31. Retrieved from https://onlinelibrary.wiley.com/journal/15360717

Mulhall, A. (2003). In the field: Notes on observation in qualitative research. *Journal of Advanced Nursing, 41*(3), 306-313. Retrieved from https://onlinelibrary.wiley.com/journal/13652648

Murphy, H. (2007). *Professional development in the field of literacy and basic education* (CINOP Report 229564-CP-1-2006-1-DE-GRUNDTVIG-G1). Retrieved from www.cinop.nl

Mylopoulos, M., & Regehr, G. (2009). How student models of expertise and innovation impact the development of expertise in medicine. *Medical Education, 43*, 127-132. doi: 10.1111/j.1365-2923.2008.03254.x

Northstar Digital Literacy Project. (2017). About the Project. Retrieved from https://www.digitalliteracyassessment.org/

Ohliger, J. (1978). Lifelong learning as nightmare. In A. Grace & T. S. Rocco (Eds.), *Challenging professionalization of adult education* (pp. 75-78). San Francisco:

Jossey-Bass.

Pappalardo, M., & Schaffer, W. R. (2016). Using research to design integrated education and training programs. *Journal of Research and Practice for Adult Literacy, Secondary, and Basic Education, 5*(3), 35-39. Retrieved from https://www.coabe.org

Park, R. (1989, November 17-18). Third avenue for ABECE licensure under discussion. *Newsletter of the Minnesota Association for Continuing and Adult Education,* pp. 2.

Patterson, M.B. (2016). Research to practice connections. *Journal of Research and Practice for Adult Literacy, Secondary, and Basic Education, 5*(3), 30-33. Retrieved from https://www.coabe.org

Perin, D. (1999). Professionalizing adult literacy: Would and credential help? *Journal of Adolescent & Adult Literacy, 42*(8), 610-619. Retrieved from http://www.jstor.org/stable/40016810

Pimentel, S. (2003). *College and career readiness standards for adult education.* Washington, DC: MPR Associates, Inc.

Resnick, L.B. (1987). Learning in school and out. *Educational Researcher, 16*(9), 13-20. Retrieved from edr.sagepub.com

Riley, D. A., & Roach, M. A. (2006). Helping teachers grow: Toward theory and practice of an 'emergent curriculum' model of staff development. *Early Childhood Education, 33*(5), 363-370. Retrieved from https://link.springer.com/journal/10643

Rocco, T. S. (2009). Informing learning for today's professionals: Learning from the social critique of mandatory continuing education. In A. Grace & T. S. Rocco (Eds.), *Challenging professionalization of adult education* (pp. 165-182). San Francisco: Jossey-Bass.

Rogoff, B. (1994). Developing understanding of the idea of community of learners. *Mind, Culture, and Activity, 1*, 209-229.

Rubin, H. J., & Rubin, I. S. (1995). *Qualitative interviewing: The art of hearing data.* Thousand Oaks, CA: Sage.

Sabatini, J. P., Ginsburg, L., & Russell, M. (2002). Professionalization and certification for teachers in adult basic education. *Review of Adult Learning and Literacy, 3*, 203-239. Retrieved from http://www.ncsall.net/?id=572

Sandelowski, M. (1995). Sample size in qualitative research. *Focus on Qualitative Methods,* 179-179-183. Retrieved from https://onlinelibrary.wiley.com/action/doSearch?AllField=sample+size+in+qualitative+research&SeriesKey=1098240x

Sawchuk, P. H. (2008). Theories and methods for research on informal learning and work: Towards cross-fertilization. *Studies in Continuing Education, 30*(1), 1-16. doi: 10.1080/01580370701628474

Schugurensky, D. (2000). The forms of informal learning: Towards a conceptualization of the field. NALL Working Paper #19-2000. Retrieved from http://www.nall.ca/res/19formsofinformal.htm

Shanahan, T., Meehan, M., & Mogge, S. (1994). *The professionalization of the teacher in adult literacy education* (Technical Report No. TR94-11). Retrieved from National Center on Adult Literacy website: http://www.ncsall.net/index.php@id=493.html

Skemp, R. R. (1979). *Intelligence, learning, and action.* Chichester: Wiley.

Skemp, R. R. (1987). *The psychology of learning mathematics.* Hillsdale, NJ: Erlbaum.

Smith, C. (2016). The role of professional development in bridging research and practice in adult literacy and basic education. *Journal of Research and Practice for Adult*

Literacy, Secondary, and Basic Education, 5(3), 40-42. Retrieved from https://www.coabe.org

Smith, C. (2010). The great dilemma of improving teacher quality in adult learning and literacy. *Adult Basic Education and Literacy Journal, 4*(2), 67-74. Retrieved from http://blog.ncladvocacy.org/wp-content/uploads/2010/08/Smith2010TQinAE.pdf

Smith, C., & Gillespie, M. (2007). Research on professional development and teacher change: Implications for adult basic education. *Review of Adult Learning and Literacy, 7*, 205-239. Retrieved from http://www.ncsall.net/index.php@id=493.html

Smith, M. C. (2005). The preparation and stability of the ABE teaching workforce: Current conditions and future prospects. *Review of Adult Learning and Literacy, 6*, 165-195. Retrieved from http://www.ncsall.net/fileadmin/resources/ann_rev/rall_v6.ch6.pdf

Stake, R.E. (1995). *The art of case study research.* Thousand Oaks, CA: Sage Publications.

Sternberg, R. J. (2003). What is an expert student? *Educational Researcher, 32*(8), p. 5-9. Retrieved from http://journals.sagepub.com/home/edr

Strauss, A. L. (1987). *Qualitative analysis for social sciences.* Cambridge: Cambridge University Press.

Strauss, A. L., & Corbin, J. (1990). *Basics of qualitative research: Grounded theory procedures and techniques.* Thousand Oaks, CA: Sage.

Strauss, A. L., & Corbin, J. (1994). Grounded theory methodology: An overview. In N. K. Denzin and Y. S. Lincoln (Eds.), *Handbook of Qualitative Research.* Thousand Oaks, CA: Sage.

Strauss, A., Schatzman, L., Bucher, R., & Sabshin, M. (1981). *Psychiatric ideologies and institutions.* (2nd ed.), New Brunswick, NJ: Transaction.

Sun, Y. (2010). Standards, equity, and advocacy: Employment conditions of ESOL teachers in adult basic education and literacy systems. *TESOL Journal, 1*(1), 142-158. doi: 10.5054/tj.2010.215135

Tomaszewski, L., & Garcia, S. J., (2008). *Texas adult education standards and benchmarks for ABE/ASE and ESL Learners: Implementation guide* (TCALL Report 1.1). Retrieved from Texas Center for the Advancement of Literacy and Learning website: www-tcall.tamu.edu/

Van Manen, M. (2007). *Researching lived experience.* (2nd ed.), Ontario: The Althouse Press.

Verschaffel, L., Luwel, K., Torbeyns, J., & Van Dooren, W. (2009). Conceptualizing, investigating, and enhancing expertise in elementary mathematics education. *European Journal of Psychology of Education, 24*(3), 335-359. Retrieved from https://link.springer.com/journal/10212

Wenger, E. (1998). *Communities of practice: Learning, meaning and identity.* Cambridge: Cambridge University Press.

Wenger, E., McDermott, R., & Snyder, W. M. (2002). *Cultivating communities of practice.* Boston, MA: Harvard Business School Press.

Wilson, K., Roe, B., & Wright, L. (1998). Telephone or face-to-face interviews: A decision made on the basis of a pilot study. *International Journal of Nursing Studies, 35*(6), 314-321. Retrieved from https://doi.org/10.1016/S0020-7489(98)00044-3

Yin. R. (1994). *Case study research design and methods.* Thousand Oaks, CA: Sage Publications.

Young, S., & Smith, C. (2006). *Understanding adult ESL content standards* (CAELA Report No. 04). Retrieved from Center for Adult English Language Acquisition website: www.cal.org/caela

Appendices

Appendix A - Interview Protocol: Original and Revised Version

Interview Protocol

Remind interview participants of the primary objective of the study

The primary objective is to reconcile the differing views on the concept of expertise as a product of professionalization in adult basic education (ABE) through an examination of the concept of 'adaptive expertise.' Studies have shown that differing views on just what expertise is in ABE remains a pervasive issue in the field due to the need to counterbalance the benefits of clearly communicated expectations of a profession with the diversity of local ABE programs.

Overarching question:

What are the individual and situational facets of expertise and their implications for learning in teacher education?

Sub-questions (more to be added depending on where the interviewee takes the interview)

1. Tell me how you became an ABE instructor.
2. Tell me about your experience as a teacher (how long you have been teaching, the learner demographic, content taught)
3. What avenues do you use for professional development?
4. What kind of professional development do you find the most useful?
5. What kind of professional development do you find the least useful?
6. Describe any challenges you've had faced in the field.
7. What resources did you use to address these challenges?
8. Why did you choose these resources?
9. Why did you decide to enter the ABE licensure program?
10. How have you referenced your professional experience in your licensure program studies?

Revised Interview Protocol

Remind Participants of the primary objective

Studies have shown that differing views on just what expertise is in ABE (is it derived from formal contexts, informal or experiential contexts?) and what that means within the diverse contexts of local ABE programs.

The primary objective, therefore, is to reconcile differing views on the concept of expertise as a product of professionalization in ABE through an examination of the concept of 'adaptive expertise.' We may touch on this explicitly in the interview depending on where the questions take you. We will explore this concept through the story of how you came to the licensure program, your experience within it, and its application in the field.

Overarching Question:

What are the individual and situational facets of expertise and their implications for learning in teacher education?

Sub-questions to guide the interview:

1. Tell me about how you came to the field of ABE?
    a. The licensure program
    b. Formal training between career changes?
    c. What were your expectations of the program in terms of what you wanted to take from it?
    d. What did you take from it?
2. Tell me about your experience as a teacher
    a. How long
    b. Learner demographics
    c. Types of content taught
    d. How do you think you've drawn upon program training while in the field (moments while teaching)
    e. How have you taken what you've learned either through life experience or professional experience and applied it in the field?
3. Describe any challenges you've had as a teacher in the classroom
    a. As a teacher working for an organization
    b. As a teacher working with learners as a part of a larger institution
4. What resources were available to address these challenges?
    a. Most useful PD?
    b. Least Useful PD?
    c. If resource deplete, how would you make use of available resources
5. What components would your ideal PD contain?
    a. Broad ABE contexts

b. Your particular context

Appendix B - Current Course Sequence*

OLPD 5201 STRATEGIES FOR TEACHING ADULTS

OLPD 5211 INTRODUCTION TO THE UNDEREDUCATED ADULT

OLPD 5212 INTRODUCTION TO ADULT LITERACY IN THE WORKPLACE

OLPD 5225 INFORMAL ASSESSMENT OF ADULT LITERACY

OLPD 5233 METHODS OF TEACHING BEGINNING ADULT LITERACY

OLPD 5234 METHODS OF TEACHING INTERMEDIATE ADULT LITERACY

EPSY 5432 FOUNDATIONS OF INDIVIDUAL/ORG CAREER DEVELOP

OLPD 5196 FIELD EXPERIENCE IN ADULT EDUCATION

OLPD 5801 SURVEY - HUMAN RESOURCE AND ADULT ED

OLPD 5202 PERSP OF ADULT LEARNING AND DEVELOPMENT

OLPD 5235 METHODS OF TEACHING ADVANCED ADULT LIT

*These are the courses for those classified as recent enrollees. While most courses have been constant EPSY 5432 is a new addition. The methods and assessment courses were also revised for the most recent enrollees.

Appendix C - Sample Lesson Plan from Field Experience

Reading Focus: Comprehension

Lesson/Materials Components **Standards addressed:** TIF: Learning Strategies Skill 2, subskill d Choose and use strategies for reviewing, evaluating, and summarizing information (oral retell, flashcards, outline, highlight main points) CCRS CCR Reading Anchor 1: Read closely to determine what the text says explicitly and to make logical inferences from it; cite specific textual evidence when writing or speaking to support conclusions drawn from the text. **Objectives:** **SWBAT...** ● Recognize own prior knowledge and use this knowledge to understand the new textual information. ● Isolate main ideas and identify supporting evidence. **Materials:** ● NewsELA "The peak of world record breaking" Level 1250L https://newsela.com/read/end-of-world-records/id/20459/
Warm-up: Discuss Title, Picture, Prior Knowledge
Introduction: **K-W-L Chart** Silent Read – Fill in "K" and "W" portions of Chart Discuss together. Read out loud. With each paragraph, discuss/define unfamiliar words or concepts. Complete "L" section of K-W-L.

Guided Practice: Student reads out loud. Highlights main ideas in one color, supporting details in another color. (Work together-first half)
Independent Practice: Complete activity independently-second half.
Extension: Student chooses favorite 2 ideas and explains why. T asks "what does this prove?" or "what does this show?"
Assessment: Quiz

Appendix D - Sample Lesson Plan/Discussion Assignment Description

Microteaching Presentation (100 points)

Standards Covered in this assessment: SEP: 8E Content: 3.C.2.a, 3.C.2.d, 3.C.2.f, 3.E.4, 3.F.1

This assignment has 2 parts:

1) A 15-minute microteaching session and 2) discussion of classmates' presentations.

1. Design a 15-minute Microteaching Presentation

- Think about the context of a class in which you would teach a lesson to intermediate readers. Design 3 learning outcomes for your hypothetical learners. You cannot use the verbs to learn, to understand, to appreciate and their ilk. Think of Bloom's Taxonomy when designing these outcomes.
- Plan a 15 minute segment (review your vocabulary lesson plan and feedback as well as the readings on various strategies for teaching comprehension and fluency). I suggest you plan a full class session--objectives, teaching/learning activities, assessments, etc. first, then determine a segment for your 15 minute segment—but you will only be sharing the 15 minute segment
- Create a PowerPoint Presentation that you will show your classmates. Elements to incorporate into the session plan include the learner demographic, course title, class session title, information about learning outcomes, and an outline of the overall session. Develop slides only for the segment you would teach.
- Write an introduction to your teaching segment that includes all of the information we need to know about what you plan to teach for this class (i.e., elements in the session plan: course title, the learner demographic, learning outcomes, activities, assessments planned for the course, and your outline for your class). This should be your first slide after the title
- Use the "notes" component of PowerPoint to describe how you might teach your 15 minute segment in more detail
- Include a slide for references at the end of the presentation
- Post your PowerPoint presentation in the "Microteaching Presentation" link in the Module 5 menu

2. Discussion of Classmates' Presentations

- Pose 2 questions to at least 2 classmates regarding their presentation. You only need to ask the questions. No references are necessary for this post.

- Answer at least 2 questions that your classmates ask about your presentation (1-2 paragraphs). Your answers should refer to course readings or outside materials. Provide a reference list

Appendix E - Sample Standards of Effective Practice (SEP)

Standard 2: Student Learning

Subp. 3. A teacher must understand how students learn and develop and must provide learning opportunities that support a student's intellectual, social, and personal development. The teacher must:

*REQUIRED - Course/Experience OPTIONAL - Secondary Course/Experience Learning Assessment Activity 3A. - understand how students internalize knowledge, acquire skills, and develop thinking behaviors, and know how to use instructional strategies that promote student learning;

OLPD 5201 - STRATEGIES FOR TEACHING ADULTS OLPD 5201: Strategies for teaching adults deals with learning theory and curriculum development based on theory. Group work on cognitive strategies for effective instruction. In class group work under Week 8, Week 9, and Week 10 This is addressed in weeks 8-11. Activities will address teaching low skilled and ESL adults, communities of learning and adult education, community development, Issues analysis techniques, and moderating techniques. Assessments will include online discussion.

3B. - understand that a student's physical, social, emotional, moral, and cognitive development influence learning and know how to address these factors when making instructional decisions;

OLPD 5202 - PERSPECTIVES OF ADULT LEARNING OLPD 5202: Focus on adult learning & development. Note these theories are appropriate to adults not children. Theories of development are explored through action learning approaches. Interviews with adults of diverse cultural and demographic background. Assigned Reading: Bjorklund, B.R., & Bee, H.L., (2007). The Journey of Adulthood (6th ed.) Upper Saddle River, NJ: Prentice Hall. Assessment: Interview Project and Class Profile Project/ Discussion

3C. - understand developmental progressions of learners and ranges of individual variation within the physical, social, emotional, moral, and cognitive domains, be able to identify levels of readiness in learning, and understand how development in any one domain may affect performance in others;

OLPD 5202 - PERSPECTIVES OF ADULT LEARNING OLPD 5202: Interviews with adult learners. Text on adult learning & Development . Assigned Reading: Bjorklund, B.R., & Bee, H.L., (2007). The Journey of Adulthood (6th ed.) Upper Saddle River, NJ: Prentice Hall. Assessment: Interview Project and Class Profile Project/ Discussion(page.

Theories that will be focused on will include Kolbergs moral development, Fowler, faith development, Eriksons developmental stages, Levinson and Loevingers adult development theory.

3.C. A teacher of adult education must understand the content and methods for teaching reading including:

3.C.1. knowledge of reading processes and instruction including:

*REQUIRED - Course/Experience OPTIONAL - Secondary Course/Experience Learning Assessment Activity 3.C.1.a : - orthographic knowledge and morphological relationships within words;

OLPD 5233 - METHODS OF TEACHING BEGINNING ADULT OLPD 5234 - METHODS OF TEACHING INTERMEDIATE ADULT LITERACY LITERACY OLPD 5233: In phonics discussion. All methods of teaching reading are both discussed and demonstrated. Site visits are also required to see how methods are used in local programs OLPD 5234: orthographic knowledge and morphological relationships briefly addressed in Greenberg, Ehri, and Perin (1997) reading

3.C.1.b : - the relationship between word recognition and vocabulary knowledge, fluency, and comprehension in understanding text and content materials;

OLPD 5234 - METHODS OF TEACHING INTERMEDIATE ADULT LITERACY OLPD 5234: Module 2 course readings and discussion, module 3 vocabulary lesson plan

3.C.1.c : - the importance of direct and indirect vocabulary instruction that leads to enhanced general and domain-specific word knowledge;

OLPD 5234 - METHODS OF TEACHING INTERMEDIATE ADULT LITERACY OLPD 5234: In readings (specifically McShane, 2005), class discussions, and vocabulary lesson plan

3.C.1.d : - the relationships between and among comprehension processes related to print processing abilities, motivation, reader's interest, background knowledge, cognitive abilities, knowledge of academic discourse, and print and digital text; and

OLPD 5233 - METHODS OF TEACHING BEGINNING ADULT OLPD 5234 - METHODS OF TEACHING INTERMEDIATE ADULT LITERACY LITERACY OLPD 5233: Beginning readers; interest, background knowledge, and motivation addressed in Jacobson (2011), Binder and Lee (2012), and Park's Guide to Active

Learning and Teaching. Print processing abilities (differences between children and adults) addressed in Wagner et al. (2006). OLPD 5234: Covered in class discussion of intermediate learner profiles in module 1

Appendix F- Sample Content Standards Used in Program

3.C. A teacher of adult education must understand the content and methods for teaching reading including:

3.C.1. knowledge of reading processes and instruction including:

*REQUIRED - Course/Experience OPTIONAL - Secondary Course/Experience Learning Assessment Activity 3.C.1.a : - orthographic knowledge and morphological relationships within words;

OLPD 5233 - METHODS OF TEACHING BEGINNING ADULT OLPD 5234 - METHODS OF TEACHING INTERMEDIATE ADULT LITERACY LITERACY OLPD 5233: In phonics discussion. All methods of teaching reading are both discussed and demonstrated. Site visits are also required to see how methods are used in local programs OLPD 5234: orthographic knowledge and morphological relationships briefly addressed in Greenberg, Ehri, and Perin (1997) reading

3.C.1.b : - the relationship between word recognition and vocabulary knowledge, fluency, and comprehension in understanding text and content materials;

OLPD 5234 - METHODS OF TEACHING INTERMEDIATE ADULT LITERACY OLPD 5234: Module 2 course readings and discussion, module 3 vocabulary lesson plan

3.C.1.c : - the importance of direct and indirect vocabulary instruction that leads to enhanced general and domain-specific word knowledge;

OLPD 5234 - METHODS OF TEACHING INTERMEDIATE ADULT LITERACY OLPD 5234: In readings (specifically McShane, 2005), class discussions, and vocabulary lesson plan

3.C.1.d : - the relationships between and among comprehension processes related to print processing abilities, motivation, reader's interest, background knowledge, cognitive abilities, knowledge of academic discourse, and print and digital text; and

OLPD 5233 - METHODS OF TEACHING BEGINNING ADULT OLPD 5234 - METHODS OF TEACHING INTERMEDIATE ADULT LITERACY LITERACY OLPD 5233: Beginning readers; interest, background knowledge, and motivation addressed in Jacobson (2011), Binder and Lee (2012), and Park's Guide to Active Learning and Teaching. Print processing abilities (differences between children and adults) addressed in Wagner et al. (2006). OLPD 5234: Covered in class discussion of intermediate learner profiles in module 1

Appendix G- Course Descriptions

In OLPD 5233: Methods of Teaching Beginning Adult Literacy, you will read about, identify and analyze initial approaches to teaching reading, writing and communications skills and the standards that support them through articles, videos, and a site visit. You will determine the fit of these approaches according to different theories of learning and curriculum design. Finally, you will discover how to use technology as a teaching tool, particularly as it pertains to teaching students with disabilities and those with cultural and gender differences.

In OLPD 5234: Methods of Teaching Adult Literacy, you will examine teaching literacy skills to adults at an intermediate level, with a focus on teaching comprehension, fluency, and vocabulary skills and content standards that support them. Description of the intermediate learner, goals, and curricula. Issues in teaching math and using distance learning.

In OLPD 5235: Methods of Teaching Advanced Adult Literacy, you will learn about advanced approaches to teaching reading, writing, and communication skills and the standards that support them. Preparing students for college and continuing education. Reading/study skills. Problem solving, analytical thinking. Technology as teaching tool. Evaluating commercial material/software.

In Perspectives of Adult Learning and Development, emphasis is on major adult development theorists, theories, and current applications. Transformative learning, self-directed learning, experiential, physiological, psychological, sociological, and cultural aspects of adult development throughout the lifespan are studied. The purpose of this course is to provide a comprehensive overview of learning and development in adulthood. Two major themes will be covered in this class: learning and development. The course content provides an examination of adults as learner. It includes the context in which learning takes place; the participants and why and what they learn; the nature of the learning process itself; and the development of theory in adult learning. The implications of this knowledge base relevant to the practice of adult education are discussed throughout the course. This course also covers the conceptual overview of stages of development from early adulthood through old age and implications for the educational process.

In Strategies for Teaching Adults, you will learn philosophies behind instruction of adult learners, teaching adults versus teaching children; learning styles; instructional techniques and design for adults; approaches to teaching diverse adult learners; strategies for teaching groups of learners.

In Designing the Adult Education Program, the purpose of this course is to provide an overview of planning and designing adult education programs. A variety of approaches and frameworks for planning, designing, and evaluating adult education programs will be explored, including practical, "how to" techniques for planning, designing and conducting programs in adult education. Students will be encouraged to explore current critiques of planning frameworks for adult education to understand and reflect on both strengths and limitations of planning processes found in adult education. As adult educators, it is important to understand the many aspects of program planning and design, including the relationship between theory and practice. This course is designed to study program planning from theoretical, conceptual, and practical perspectives meant to engage informed, insightful and critically reflective practice.