Abstract

This qualitative, single-case study described the professional learning experiences of a group of beginning teachers who participated in a California teacher induction program. The study contributes to an understanding of factors that form the foundation of professional learning as perceived by the participants. Furthermore, the study adds to extant literature on induction, including the transition period between pre-service and in-service phases, experiential learning throughout day-to-day events, and action research undertaken during inquiry-based projects. The following themes emerged from the study: transition from pre-service to induction, context for teaching and learning, collaboration with peers, subtle shift from content standards to Common Core standards, questioning and ascertaining the merits of inquiry as professional development, learning by experimentation and from life experiences, current practice as the ultimate payoff, nurturing experiential learning, obstacles to induction, and managing the 21st century classroom. The research also found that beginning teachers perceive induction as one component that contributes to their professional learning. They deemed other factors, such as school climate, leadership, and bureaucracy as elements that could either advance or thwart their development.

Keywords: Professional learning, professional development, induction, pre-service, in-service, support providers, mentors, inquiry, action research, job-embedded professional development, experiential learning, reflection, BTSA, Common Core.
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Finally, I extend a big thank you to the ten beginning teachers who participated in the study. I trust that your devoted efforts with students will yield the best fruits for society’s future.
Dedication

This doctoral work is dedicated to my three sons: Sam, Jr., Kenny and Julian.

I hope that through this accomplishment, I have modeled perseverance and ambition for your own pursuit of success.

*****

In loving memory of my dad, Wesley Albert Lewis, whose voice, enriched with reason, discipline and dedication, still whispers in my ears.

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In recognition of my mother, Veralee Lewis, who constantly prays to the Lord for my guidance.
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Chapter I: Introduction

Statement of the Problem

In an era of digital technologies, global connectedness, and collaboration—commonly known as the knowledge–based society (Drucker, 1994)—it is crucial that teachers learn and model the same skill sets that are recommended for today’s students (Zhao, 2010; Wilhoit, 2012). However, educators still attend professional development workshops, in which they have minimal input, hold no stake, or have follow-up opportunities for implementation support within the context of their learning environments (Wilhoit, 2012). In order to transform professional learning that aligns with shifting paradigms, one potential intervention is to initiate the change with beginning teachers during their formal induction phase (Giles, Wilson & Elias, 2010; Gravani, 2007). Traditional professional development experiences in which an “expert” trains novices during one-shot, workshop approaches are outdated and insufficient for impacting the work of teachers (Reeves, 2010). Stakeholders, such as parents, policymakers, and education advocates, call for a revitalized, systemic mode of professional learning, acquired through transformational, inquiry-based, reflective practices in the K-12 arena as school districts implement Common Core State Standards (Guskey & Yoon, 2009; Kesson & Henderson, 2010).

Given the paradigms shifts in instructional practices, it is crucial that educational organizations and school districts attend to the professional learning needs of all teachers, but more importantly, beginning teachers (Wilhoit, 2012). Absent a systemic change that improves professional development practices, beginning teachers could be shortchanged of the skills and best practices required to positively impact their careers and student achievement over time (Clayton, 2007).
This qualitative study examined the inquiry-based, reflective practices in a California school district teacher induction program. Pursuant to Senate Bill 2042 and Assembly Bill 2210, the state of California requires its beginning teachers to participate in induction or a clear university program as a requirement for full licensure by the end of the first two years of teaching (California Commission on Teacher Credentialing [CTC], 2011). The preferred route is induction especially if a teacher is employed in a school district that sponsors a state-approved induction program. Formerly known as Beginning Teacher Support and Assessment (BTSA), this job-embedded professional development system provides the opportunity for beginning teachers to engage in a formative assessment, inquiry-based process, along with the support of a trained mentor (BTSA California Induction, 2012).

Given their experiences with inquiry-based projects and action research acquired during BTSA, teachers who complete induction may readily embrace new initiatives (Darling-Hammond, 2010). In curricular paradigm shifts, such as Common Core Standards, teachers need to guide students through inquiry-based learning projects and integrated curriculum (Vicello, 2013). By describing how BTSA teachers perceived their induction professional learning experiences, the study gained insight into beginning teachers’ adaptation to a change environment. In other words, by reflecting on the results of their continuous cycles of inquiry (action research) via the BTSA induction model, the teachers made determinations as to whether these experiences empowered them to work effectively in increasingly dynamic environments. Moreover, they reflected on the effectiveness of inquiry-based skills as the catalyst for revitalizing teacher professional learning.

A general consensus in the literature holds that there is dissatisfaction among educators with the manner in which professional development is administered (for example, Ball &
Forzani, 2011; Drago-Severson, 2011; Guile, 2001; Vermunt & Endedijk, 2011; Zhao, 2010).

This dismal situation has negative implications for teacher development, lifelong professional learning, students’ academic growth, the national educational system, and by extension, the global society (Darling-Hammond, 2010). In contrast to the traditional system, BTSA induction enacts inquiry-based learning within the job environment, enabling beginning teachers to identify problems in their classrooms, experiment with solutions, attempt to use them, and make meaning from the new knowledge.

The literature is rich with studies that identify gaps in teacher professional learning from a teacher-learner dissatisfaction point-of-view, reporting on the need for systemic improvement and a design that fosters teacher engagement and collaboration, coupled with implementation support (for example, Guskey & Yoon, 2009; Reeves, 2010; Wilhoit, 2012). Solutions of transformative practices abound through the lens of collegial inquiry (Drago-Severson, 2009), global competence (Zhao, 2010), collaborative inquiry (Guile, 2001; Vermunt & Endedijk, 2011) and common foundation teaching principles (Ball & Forzani, 2011). In multiple cases, the research focuses on groups of teachers across career developmental stages, a blend of novices and veterans. However, given curricular shifts to Common Core State Standards and dynamic technology environments in which American education is currently situated, there is a vast field to be explored in determining how a new generation of beginning teachers as an emerging group will transfer theory and skills to contemporary settings during their early years of teaching and beyond. Moreover, there have been minimal studies in the literature on the impact of beginning teachers’ action research projects conducted in induction programs at the school site level that conform to a job-embedded model of professional learning, leaving room to investigate their benefits and shortcomings (Ingersoll, 2012). These gaps in the literature provide opportunities
for exploratory and investigative case studies on the local contexts of beginning teacher experiences during induction.

The purpose of this research was to gain insight into the impact of a beginning teacher induction program during Common Core implementation in a suburban district high school. By engaging in a qualitative investigation of a target group of California beginning teachers’ reflective experiences through inquiry-based, job-embedded professional learning activities, the education community can identify factors from the findings that generate success as these teachers advance deeper into professional practice, while adapting to shifting paradigms. Equally beneficial was the discovery of the obstacles and inhibitors that may be addressed to enhance administrative support of beginning teachers. Local and state policymakers can implement recommended ideas for practice and conduct further research in their decisions to sustain effective professional learning programs and resources.

Significance Statement

At the heart of every effective classroom is a strong, devoted, creative, and dynamic teacher, embracing the opportunity to educate the world’s next generation of citizens (Darling-Hammond, 2010). Hence, developing and nurturing teachers’ pedagogical skills from as early as induction and throughout their career will result in educational advantages on a global level. This study was significant because it contributed to an understanding of factors that form the foundation of professional learning as perceived by beginning teachers in a California induction program. The findings from this study add to the literature on teacher development during the in-service years, experiential learning during their day-to-day events, and action research undertaken during inquiry-based projects. The information gleaned might be of interest to
scholars, practitioners, educational organizations, and government agencies as their stakeholders adapt to shifting paradigms.

One significant factor of the study is the information it has garnered about beginning teachers’ classroom performance immediately after student teaching, upon completion of teacher preparation programs, or alternative pathways into teaching, such as internships. During the pre-service phase, teacher candidates, under the direction of a cooperating teacher, apply theories they have learned in college in a classroom. Since this practicum experience is short-lived and limited, “Learning to teach [becomes] an increasingly complex endeavor with nuances that elude even those carefully observing it” (Lawrence & Butler, 2010, p. 155). Teacher educators might benefit from knowing how their candidates fared beyond teacher candidacy, enabling them to construct stronger pre-service models (Darling-Hammond, 2006). Further, by having an appreciation for beginning teachers’ perspectives on their induction work and its related impact, school districts can provide continuous cycles of professional development that build on lessons learned within the unique contexts of the beginning teacher’s instructional environments (Ball & Forzani, 2010). In addition, having examined the beginning teachers’ action research projects, professional development coordinators can tailor the content of workshops to further support the beginning teachers’ needs and build collegial inquiry (Drago-Severson, 2009).

This study points to the manner in which policymakers fund teacher development. While federal, county and state education agencies have an interest in funding the cost of instructional resources and professional learning, they do not necessarily target dollars toward the categories of teachers who may need it most (Fermanich, 2002; Schaeffer, 2010). Research data from this study provide needs-assessment information regarding the priority to be given to teachers at the early developmental stages (Drago-Severson, 2009). As government agencies make funding
decisions about the how professional development dollars should be spent, these data are relevant to the specific needs of beginning teachers (for example, release time for beginning teachers to collaborate with others).

In addition, results from this study could have an exponential effect on other beginning teachers in the participants’ districts, home state, and across the country. As beginning teachers engage in their custom-driven, inquiry-based projects and develop unique practices, they begin to sharpen their skill sets and make improvements within the dynamic instructional environment in which shifting paradigms are the new norm (Taranto, 2011; Desimone, 2011). Once these reflective, job-embedded professional learning experiences are shared with others, lessons could be learned from the direct voices of beginning teacher counterparts.

The most impactful significance of the study is the potential benefit it might have on student achievement. When students are placed with a well-prepared teacher, regardless of his or her developmental stage, the impact is powerful (Darling-Hammond, 2010). With a high-quality teacher on hand, student achievement could rise and students can have the competitive advantage it takes to survive in a knowledge-based economy (Zhao, 2010). Stakeholders maintain it is not acceptable to staff classrooms with ill-equipped teachers; children in all classrooms deserve highly qualified faculty (Clayton, 2007). Shaping professional learning at the outset of the teaching career is an investment for present and future generations (Darling-Hammond, 2010). Michalec (2013) advocates for robust, integrated professional development for teachers in which they can grow; by enacting this measure, the probability rises for greater student achievement.
Positionality

**Interest in research topic.** As a scholar practitioner engaged in the day-to-day work of teacher induction, I was intellectually curious about the impact of my work as a district level professional development and induction coordinator. Understanding how induction has influenced the beginning teachers’ practice enabled powerful feedback for analysis on how inquiry and reflection set the stage for their professional careers. The findings demonstrated the impact of professional learning on their instructional practice as they adapted to the shifting paradigms of the Common Core and prepared students for a dynamic global economy. Further, based on the results of this study, I have identified areas to strengthen and improve the district’s induction program with the potential to communicate the results throughout the induction and professional development community.

**Biases.** Considering that researchers approach problems of practice and research participants with their unique cultural, social, and economic backgrounds and experiences, it is recommended that biases and opinions be defined and acknowledged prior to the start of the research (Machi & McEvoy, 2012). Inevitably, researchers carry with them positionalities in which care must be taken to prevent pollution or corruption of their data collection by way of making interpretations and judgments that are narrowly focused, oversimplified, or inaccurate. According to Carlton Parsons (2008) “...positionality is a concept that acknowledges roles of race, class, gender and other socially constructed identifiers in being” (p. 1129), establishing the notion that inherent characteristics and attributes cannot be separated from one’s research endeavors.

Based on the rationale for examining one’s positionality, according to the literature, I was cognizant that certain experiences in my background were relevant to the research topic and
contributed to potential bias that could have surfaced within the scope of the study. In particular, my previous classroom teaching experiences and current administrative privilege were of paramount importance.

**Classroom teacher.** As a former classroom teacher, I firmly believe that teachers’ classroom practices are governed by their educational philosophies and the manner in which they manage their learning communities. In my early years in the profession, I took generous advantage of professional learning opportunities that included classroom management, equity, and differentiation toward my progress as an effective teacher. Consequently, my bias included the natural inclination to evaluate participating teachers’ classroom management philosophies and styles by my own standards. For example, I typically place emphasis on how girls, English language learners, and “minority” students are addressed to the exclusion of other groups. In one of Jupp’s & Slattery’s (2010) interviews on racial tensions, a participant remarked, “Teachers are certainly biased against certain children, especially if they don’t know them” (p. 206). Having witnessed a number of educators’ discriminatory practices toward children of minority groups and low socio-economic status, I could have been overly subjective in assessing teacher behavior that was deemed prejudicial toward certain students.

**Administrative privilege.** Given my current position as district induction and professional development coordinator, I have jurisdiction over the induction work of beginning teachers. Hence, I came to the research as a participant observer of proceedings in which I have been embedded, affording me the benefit of an “inside observer” (Creswell, 2012, p. 214) who had a comprehensive picture of the research setting. Although this privilege has its advantages in understanding the context and facilitation of the research, the potential for bias existed because I
have broad based knowledge of the participants’ work habits and ethics that could have influenced my review and interpretation of the data.

Nevertheless, my belief that beginning teachers should be strongly supported by their employing institutions so that induction experiences lay the foundation for future professional learning and service took precedence in the study. By the same token, I believe beginning teachers are duty-bound to take advantage of the supporting personnel and resources offered to them and not treat the induction process as repetition of teacher education courses. In previous eras, beginning teachers did not have the benefit of induction, and reduction in teacher attrition numbers is often attributed to the success of induction programs (Ingersoll, 2012). Hence, my bias in how participants demonstrate appreciation for the induction program could have been influenced by their attitude and willingness to comply with program requirements.

As one of the district’s agents responsible for Common Core implementation, I was able to observe general teacher behavior toward this curriculum shift. It is clear that beginning teachers found themselves in a unique situation because those who are in charge of mentoring them are also new to the shift, and have little to no experience to share. Thus, collaboration between mentor and mentee in which neither is an expert made them both vulnerable to the new system. As I noted the mentor-recorded documents about interactions between mentors and their mentees, I was potentially biased toward the quality of support beginning teachers received in this change effort.

**Conclusion.** Ultimately, as I continued to reflect on my positionalities, I became increasingly conscious of the potential biases that could occur. Consequently, I strived to acquire the discipline required to eliminate any negative impact on my work as a scholar practitioner. The goal was to be mindful of pitfalls that could tarnish the research product, and be purposeful
in avoiding them. This effort enabled me to focus on the participants’ responses as their original and authentic experiences, thereby, fulfilling the research objectives as they were intended.

**Research Questions**

The literature and my own positionality and experiences as an administrator led me to the following overarching research question: What is the induction experience for beginning teachers during the implementation of Common Core Standards in a California suburban high school district? Sub-questions also guided my inquiry: What are the beginning teachers’ perceptions of job-embedded, professional learning? How are the needs of beginning teachers as experiential learners met (or not met) in the induction program?

**Theoretical Framework**

**Introduction.** Kolb’s Experiential Learning Theory was used as a framework that provided a lens to view the problem of practice. The primary focus of the theory is a move away from the behaviorist method of learning, in which the learner passively absorbs knowledge, to an active stance, befitting the constructivist paradigm, in which the learner is intricately involved in the cognition of the learning experience (Kolb, 1984). The emphasis of the theory is not to pose a separate theory of learning but to offer experiential learning theory as “a holistic integrative perspective on learning that combines experience, perception, cognition and behavior” (Kolb, 1984, p. 21).

The purpose of this section is to demonstrate how Kolb’s Experiential Learning Theory (1984) aligns with the problem of practice on beginning teachers’ professional learning experiences and how its components were used to explore the research questions, design the methodology for the research, and assess the findings gathered from participants’ input. This section is organized into three subsections: (1) Description of Kolb’s Experiential Learning
Theory, (2) Seminal Authors and Contemporary Theorists, (3) Rationale for Choosing Theory, and (4) Alignment with Proposed Project.

**Description of Kolb’s theoretical framework as chosen lens.** In reviewing the California induction program’s Plan-Teach-Reflect-Apply cycle, an adaptation from Deming’s (1986) *Out of the Crisis* (see Figure 1), various commonalities surfaced that were present in Kolb’s Experiential Learning Theory, such as concrete experience, application, and reflection throughout the phases of professional learning. As beginning teachers develop and refine their instructional craft, individual experiences are impacted by support or lack thereof. Kolb’s Experiential Learning Theory offers a sound framework consistent with parameters under which the beginning teachers’ experiences could be studied.

![Plan-Teach-Reflect Cycle](image)

**Figure 1.** Plan-Teach-Reflect Cycle (California Commission on Teacher Credentialing, 2014)

**Philosophical foundations.** Kolb’s (1984) experiential learning theory draws on the intellectual work of John Dewey (1938), Kurt Lewin (1946) and Jean Piaget (1958) in its emphasis of experience as the primary role of the learning process. Compared to behaviorists’ philosophies that rely on learning as “acquisition, manipulation, and recall of abstract symbols”
Kolb (1984) offers the theory that experiential learning assumes an integrated approach, which combines “experience, perception, cognition and behavior” (p. 21). Kolb purports that the Dewey-Lewin-Piaget models support the tenets of his experiential learning theory: action research (Lewin), dialectic process, observations and actions (Dewey), and concrete phenomenalism to abstract constructionism (Piaget). It is from these philosophical origins that Kolb developed his experiential model and learning styles, known as the Learning Styles Inventory (Kolb, 1984). The Learning Styles Inventory is outside the scope of this study.

**Kolb’s learning cycle.** The central theme of the Kolbian theory is its characteristics that portray learning as a cyclical process (Kolb, 1984). These characteristics include: the conception of learning as a process, not an outcome; a continuous process grounded in experience; the necessity to resolve conflicts between dialectically opposed modes of adaptation to the world; learning as an holistic process of adaptation to the world; and transaction as an element of learning between the person and the environment (Kolb, 1984). There are four modes in the cycle of learning: “concrete experience, reflective observation, abstract conceptualization and active experimentation” (Turesky & Gallagher, 2011, p.6). Hansen (2012) ascribes specific interpretations to each mode: concrete experience—direct encounter with the experience; reflective observation—reflection and internalization of the experience; abstract conceptualization—creation of rules and strategies related to the experience, and active experimentation—application of strategies and rules related to the experience.
Figure 2. Kolb’s cycle of experiential learning (University of Texas, 2014)

Significance. Experiential learning, according to Dewey (1938), is the combination of experience and reflection, which equals learning. It is the experience that enables a person to physically or mentally engage in a setting, allowing him or her to struggle yet emerge with a new mindset about the experience (Fowler, 2008). Proponents of experiential learning contend that no true learning that is sustainable can occur if at some level, the individual is not given opportunities to engage in experiential learning (for example, Dewey, 1938; Mezirow, 1981; Kolb, 1984; Jarvis, 2004). Regardless of format, its purpose is to engage the learner in deep cognition and a new way of thinking after going through cycles within and after the experience (Kolb, 1984). Experiential learning is employed in educational institutions to engage, authenticate and sustain student participation (Blenkinsop & Beeman, 2012; McClellan & Hyde, 2012), and in the workplace to foster team building and generate buy-in and rationale of organizational goals (Turesky & Gallagher, 2011).

Seminal Authors and Contemporary Theorists

Trajectory. Originating from Dewey’s (1938) work, Experience and Education, experiential learning, as the name suggests, is embedded in experience and formed the crux of
the progressive movement. With time, however, other characterizations of the model have
morphed to include additional aspects of experiential learning. For example, Burnard (1991)
offered “learning-by-doing,” which involves reflection and is an active rather than a passive
learning process (Fowler, 2008). On the international front, experiential learning in Europe is
group-based whereas Americans focus on work and field-based placements; Australians seem to
acknowledge both types (Fowler, 2008). In addition, Freire (1972) offered group consciousness
and community action; Kolb (1984) offered the grasping of experience; and Steinaker and Bell
(1979) offered a taxonomy (immersion, deepening and experience at differing and progressive
levels (Fowler, 2008).

At the first experiential learning international conference, Weil and McGill (1989)
offered a typology, termed “villages,” to accommodate pervasive clusters of thought: (1)
Pathways to higher education, employment and training; (2) Change in social structures; (3)
Group and social consciousness; and (4) Personal growth and self-awareness (Fowler, 2008). In
addition to “villages,” multiple lenses exist by which scholars base their perceptions of
experiential learning. Merriam, Caffarella and Baumgartner (2007) categorize scholars’
perceptions of experiential learning based on their theoretical orientation. Their categorization
includes, among others, Kolb’s (1984) and Jarvis’s (1987) constructivist paradigms; along with
Boud and Walker’s (1991), and Usher, Bryant and Johnson’s (1997) situative paradigms
(Merriam et al., 2007).

**Critique of Kolb’s theoretical origins.** Although there is global acceptance of Kolb’s
experiential model, it is not without criticism. While Miettinen (2000) acknowledges that Kolb’s
work is indeed a classic model and “used routinely in the literature of the field and in the theses
of adult education students” (p.55), he contends that the model does not purely align with those
of Lewin, Dewey and Piaget. He proffers that Kolb misrepresents each model by claiming the relative theorists’ acceptance of the concrete experience of learning in distinct phases. Instead, he claims, the theorists clearly distinguish their theory through learning as a continuous process, which is affected by other socio-cultural factors (Miettinen, 2000).

Another criticism of the Kolb’s experiential learning is that its modelling syntax is logically flawed. Bergsteiner, Avery and Neumann (2010) posit that the model is constructed with points at the end of each activity as opposed to lines, which do not portray the continuous nature of learning that the theory purports to convey. Furthermore, Bergsteiner et al. (2010) cite instances of tautology in the model, such as the term *active experimentation*, given that experimentation is by nature “active,” and *abstract conceptualization*, since a concept is characteristically “abstract.”

**Rationale for Choosing Kolb’s Experiential Learning Theory**

In making a decision on the best fit for a theoretical framework, Bandura’s (1977) social learning theory and Kegan’s (1980) constructivist-developmental theory were deemed close contenders that bore similarities to Kolb’s Experiential Learning Theory, due to their concrete, developmental, and interactive nature of learning. Despite these features, they lacked strong parameters as a lens to view the learning experience that this research study sought. Kolb’s Experiential Learning Theory was selected due to its dominance as a framework for examining learning experiences. It possessed structured parameters for exploring the learning experiences of beginning teachers as they go through the stages and nuances of teacher development, given that beginning teachers enter the profession with limited experience of pedagogy and classroom management (Darling-Hammond, 2010). Being cognizant of a learning cycle in which experiential learning is situated enabled both participants and researcher to appreciate
components and iterative cycles of the learning experience. Furthermore, the research question sought to discover beginning teachers’ perspectives on their induction experiences, exploring the cultivation of independence and confidence to pursue lifelong professional learning. An in-depth explanation of how the framework aligns with the research project is offered next.

**Alignment with Research Project**

**How framework shaped problem of practice.** Kolb’s Experiential Learning Theory was a powerful fit for this problem of practice due to its cyclical nature. During California teacher induction, beginning teachers engage in a formative assessment system in which they identify problems encountered in daily instructional practice (California Commission on Teacher Credentialing, 2014). After identifying a problem, they attempt to solve it through action research by experimenting with potential solutions. Later, they reflect on those actions, correct mistakes, and continue the cycle with subsequent attempts to arrive at a feasible resolution. This action research cycle mirrors the elements and phases in Kolb’s Experiential Learning Theory. Parallel to the *concrete experience* in the theory, the beginning teacher experiences real world problems that pose a concrete stage in teacher development. In experimenting with solutions, teachers experience the event during real time instruction, undergoing its emotions and building schema that emanate from the experience (Kolb, 1984).

Subsequently, in a metacognitive mode, the teacher reflects on what occurred and assesses self-behavior and interaction with students. Continuing within the theory’s learning cycle, the teacher enters the *abstract conceptualization* phase, during which “truth finding” occurs. In this stage, the teacher explores a rational explanation for what transpired and proceeds to modify the first course of action by revising it for an improved outcome. It is within this phase that teachers may seek additional resources and support from a mentor or administrator.
Potentially ready for active experimentation, and with renewed confidence, they begin a fresh cycle, based on lessons learned from the first concrete experience (Kolb, 1984).

**How framework shaped the research question.** Overarching question: *What is the induction experience for beginning teachers during the implementation of Common Core Standards in a California suburban high school district?*

At the core of the research question was experience. The study was designed to elicit authentic information from the people who were living the experience. Their experiences were not one-shot episodes but were worthwhile building blocks to their professional learning and career development (Reeves, 2010). The experiential learning theory was a match for this phenomenon because it provided a lens to view their experiences (Creswell, 2012) via the focus points in the learning cycle. Given this theoretical framework, the teachers expressed what occurred during the structured stages: concrete experience, reflective observation, abstract conceptualization, and active experimentation.

**How framework shaped methodology.** The methodology was qualitative in nature in which the researcher conducted semi-structured, one-on-one interviews along with documentation reviews from mentor-recorded, classroom observation and notation of participants’ portfolios and artifacts (Creswell, 2007). The methodology was designed to maximize participants’ opportunities to respond to open-ended questions about their experiences and illustrate responses with evidence from their work. This offered a pathway to discuss the concrete experiences, reflective observations, abstract conceptualization, and active experimentation. The questions addressed each phase of the learning experience to capture the teachers’ perspectives of their professional development.
How framework shaped findings of study. The theory set parameters for the study’s outcome. By setting limitations on the interview questions, observations and documentations, the researcher maintained topic boundaries for investigating the teachers’ learning experiences within the stages of the learning cycle. Given that the questions were open-ended, participants offered unrestricted and unique responses, which were skillfully coded for analysis (Saldana, 2013). Managing the interviews was crucial to ensure that the participants did not veer off course into topics that were irrelevant to the study or that not align with the theoretical framework.

Conclusion

Given California’s beginning teachers’ unique experiences with inquiry-based projects and action research acquired during induction, experiential learning was modeled through Kolb’s Experiential Learning Theoretical framework. Researching the teachers’ perceptions of their experiences at specific stages in the learning cycle provided insight to the issue of sustained and impactful professional learning. Besides, in curricular paradigm shifts, such as the transition to Common Core Standards, teachers are expected to guide students through inquiry-based learning projects and integrated curriculum. By engaging in similar types of professional learning, these teachers were potentially enabled with a firsthand account of types of experiential skill sets that students need to succeed with Common Core (Demski, 2013; Fletcher, 2012).

Moreover, beginning teachers’ adaptation to a change environment was explored. Simply put, by reflecting on the results of their continuous cycles of inquiry (action research) via the induction, experiential learning model, participants determined if these experiences empowered them to work effectively in increasingly dynamic environments. Furthermore, the effectiveness of inquiry-based skills as the catalyst for revitalizing teacher professional learning was explored. Findings from this study yielded fruitful concepts that can assist the education community in
determining what it means when educators engage in *concrete experience, reflective observation, abstract conceptualization* and *active experimentation*. This information may enable stakeholders to procure resources that facilitate systemic, professional learning improvements.
Chapter II: Literature Review

As the majority of states implement Common Core standards, aiming to bolster college- and career-readiness for students (Marrongelle, Sztajn, & Smith, 2013), it is worthwhile that policymakers and institutions take a closer look at the educational system and instructional engine through which this curricular mechanism will unfold (Fletcher, 2012; Vicellio, 2013). Undoubtedly, teacher preparation and continued professional learning are the fuel for this engine (Huling, Resta & Yeargain, 2012). Yet, the educational system lacks robust professional instructional practices for educators, with the most vulnerable group being beginning teachers—educators who are transitioning from pre-service to the in-service phase (Darling-Hammond, 2010). As Ball and Forzani (2011) declare, there needs to be a fundamental shift in improving the quality of teaching across the United States by establishing a body of professional knowledge that will accommodate the needs of aspiring teachers.

In essence, the 21st century classroom is a complex environment in which the beginning teacher must seamlessly integrate engaging, project-based learning activities and ensure college and career readiness skills (Fletcher, 2012). Therefore, beginning teachers must be in tune with student dynamics, relationship building and their application to the curriculum (Michalec, 2013). Engaging in teacher inquiry provides the opportunity for experiential learning as one pragmatic approach to achieve this goal as beginning teachers make the transition to the Common Core State Standards (Darling-Hammond & Bransford, 2005; Clayton, 2007).

A close analysis of Common Core elements as presented in the literature reveals the need for teachers to utilize skills that are not traditionally taught in teacher education programs (Demski, 2013; Zhang, 2014). Fletcher (2012) contends that, “The CCSS [Common Core State Standards] demands a different way of teaching, requiring depth, an emphasis on complex...
problem-solving…” (p. 27). While a new generation of teachers is currently being trained in Common Core methodologies, there are teachers who earned credentials prior to the reform that are now called upon to embrace the new shifts within their instructional practice (Giles, Wang, Smith, Johnson, 2013; Levine, 2014). Thus, aside from veteran teachers who are faced with a comprehensive overhaul of their practice, cohorts of beginning teachers are wedged between these two groups, seeking guidance as they make the transition (Zhang, 2014; Levine, 2014).

Fallon (2010) characterizes the transition to Common Core as the Golden Age of Teacher Education. He argues that teacher education has entered a dynamic environment that is filled with rapidly advancing elements of inquiry and investigation and further declares that “teachers need time to experiment and fail so they can learn” (p. 35). Teacher-inquiry aptly fits into this paradigm, since it allows for cyclical reflection, renewed learning and concrete action (Feiman-Nemser, 2001; Dana & Yendol-Hoppey, 2009).

The purpose of this literature review was to explore the literature on beginning teachers as they embark on their induction journeys as experiential, adult learners, utilizing the tools of teacher inquiry or action research (used interchangeably) as job-embedded professional development. The overarching research question is What is the induction experience for beginning teachers during the implementation of Common Core Standards in a California suburban high school district? The sub-questions are What are the beginning teachers’ perception of job-embedded professional learning? and How are the needs of beginning teachers as experiential learners met (or not met) in the induction program?

The literature review is organized into five sections. It begins with (1) beginning teachers and their professional learning needs, followed by (2) beginning teachers as independent experiential learners, (3) the role of induction programs, (4) teacher inquiry or action research as
a tool for job-embedded professional development, and ends with (5) beginning teachers’ transition to Common Core.

**Beginning Teachers and Their Professional Learning Needs**

The typical pre-service teacher often enters the in-service phase with high expectations of success in professional practice, based on the theoretical foundations received during his or her teacher preparation program (Feiman-Nemser, 2001; Darling-Hammond, 2006; Fry, 2007; Goodwin, 2012). In the real-world setting, however, beginning teachers eventually discover that teaching is a complex and dynamic endeavor in which lifelong preparation is constant. They often discover that their college preparation and student teaching practicums rarely simulate the experiences of professional practice (Craig, 2013; Smith, Desimone, Porter, McGraner, Haynes (2012). As Goodwin (2012) contends, beginning teachers experience much shock as strategies they were taught in college, and may have utilized during student teaching, prove insufficient in their own classrooms, leading to significant frustration and attrition. A justification for the high rate of attrition presented in the literature is attributed to a perceived mismatch of adequate preparation versus relevant and required preparation for their individual settings (Ingersoll & Smith, 2003; Smith & Ingersoll, 2004; Hong, 2010). Fry (2007) reports that beginning teachers perceive their college courses as having major gaps in theory and what is necessary to survive in the actual classrooms. Thus, beginning teachers often begin the professional journey feeling inept, as they come to terms with the reality that their burgeoning practitioner needs are complicated and far outweigh their perceptions of what their classroom challenges might be (Hong, 2010; Van Hover & Yeager, 2004; Darling-Hammond & Bransford, 2005).

As beginning teachers join the mix of veteran teachers on school sites, they are generally astounded that their professional learning is often not differentiated from that of their more
experienced colleagues (Fry, 2007). As such, they are offered similar one-shot, workshop approaches to professional learning on material that has minimal value to their unique needs and inexperience (Fry, 2007). Their perceptions of professional development as it is meted out to them are rife with negative accounts (Goodwin, 2012). One major component that beginning teachers cite is lack of consistent training in classroom management. A single, one-day teacher orientation is perceived as cursory to counteract the multiple episodes of discipline scenarios they face on a daily basis (Hong, 2010). In essence, beginning teachers envisioned that in their professional practice, resources and staff would be readily available to assist them with challenges; in reality, this is usually not the case (Feiman-Nemser, 2003). Hence, their perception of the educational system, once they are in the thick of their own classroom responsibilities, typically amount to a wall of insurmountable challenges (Feiman-Nemser, 2012a).

Researchers posit that beginning teachers enter the profession with beliefs that originate from their own experiences as learners (Feiman-Nemser, 2001; Hong, 2010). They bring to the classroom the philosophy of learning as absorption and memory, leading to a picture of “themselves standing in front of a group of attentive students, presenting information, going over problems and giving explanations” (Feiman-Nemser, 2001, p. 1017). Ironically, researchers report that some beginning teachers perceived that they would not encounter issues with classroom management; thus, assuming naively that prior experience with children would negate the need for training in this area (Feiman-Nemser, 2003). Beiler (2012) offers that some beginning teachers who have had success in coaching children in sports, anticipated that the children in their classrooms would exhibit the same level of respect and engagement. They
usually end up disappointed when they realize coaching and instructional prowess require different skills, and success in one does not necessarily produce the same results in the other.

The research is clear that beginning teachers’ perceptions of their professional learning needs fit into three main categories: classroom management, curricular freedom and avoidance of the “sink or swim” phenomenon (Goodwin, 2012). Hence, researchers offer myriad solutions for beginning teachers’ professional learning that include classroom management tips, modeling of lesson plans, constructive feedback on instruction, and scaffolded assistance along with mentoring guidance (Feiman-Nemser, 2012b; Beiler, 2012). However, beginning teachers need a bridge by which they can “link theory and practice, develop skills and strategies, cultivate habits of analysis and reflection through focused observation, child study, analysis of cases, microteaching and other laboratory experiences” (Feiman-Nemser, 2001, p.1020). Induction typically serves as this bridge phase, a period in which teachers can exercise their independence and autonomy as experiential learners (Algozzine, Gretes, Queen, Cowan-Hathcock, 2007; Fry, 2007, Feiman-Nemser, 2012a; Snyder, 2012).

**Beginning Teachers as Independent, Experiential Learners**

As teacher candidates transition from pre-service to in-service practice, they sit on the threshold of self-directed learning (Snyder, 2012). Defined by Merriam, Caffarella and Baumgarner (2007), self-directed learning occurs when people engage in “planning, carrying out, and evaluating their own learning experiences” (p. 110). Thus, instead of attending formal college lectures and participating in student teaching practicums, beginning teachers have to acclimate to professional training, usually delivered via workshops from which they—mostly independently—will need to decipher relevance to their instructional environments (Fletcher, 2012). In addition, beginning teachers routinely engage in informal learning, amassing and
filtering ideas, throughout their day-to-day interactions with colleagues whose professional experience varies from novice to veteran. Their ability to determine best practices is contingent on whether they can evaluate if these practices are beneficial in their individual settings (Clayton, 2007).

In an effort to support beginning teachers’ professional growth during this vulnerable period of their careers, scholars and practitioners recommend that professional development facilitators embrace tenets of adult learning theory as they facilitate experiential learning among beginning teachers (Curry, Kim, Russell, Lin, Callahan, & Bicais, 2002; Snyder, 2012). According to Malcolm Knowles (1980), the renowned father of adult learning (andragogy), adults learn differently from children, contrasting with pedagogy (Merriam et al., 2007). Knowles’s original model was based on four assumptions: a shift from dependency to self-directedness; the accumulation of experience, which serves as a resource for new learning; readiness for learning being related to developmental tasks in social roles; and problem-centeredness versus subject centeredness in learning (Merriam et al., 2007). He later added two more assumptions: intrinsic motivation and the rationale for learning something (Merriam et al., 2007). These assumptions strongly align with the philosophy that the beginning teachers’ professional learning is mostly experiential and transformational and accommodations should be made to support their needs (Green & Ballard, 2011; Snyder, 2012).

Learning from experience and reflection is the crux of experiential learning and emanates from the literature as far back as Dewey’s progressive movement, delineated in *Experience and Education* (1938). Notably, Kolb (1984) contends that his model of experiential learning theory is a derivative of three learning constructs: Dewey’s experiential model, Kurt Lewin’s action research model, and Jean Piaget’s cognitive development model. Given opportunities to engage
in experiential learning, such as action research, teachers are likely to reflect on their classroom experiences. In this endeavor, they learn from the concrete nature of the experience through observations, abstract generalizations, and implications (Kolb, 1984).

As beginning teachers acquire new strategies, implement them in the classrooms, and reflect on their success or failure, they develop new levels of schema in which the metacognitive process helps refine new approaches to their pedagogy (Snyder, 2012; Ball & Forzani, 2011). According to Snyder (2012), teaching and learning must be experienced in multiple formats on several occasions. She argues that teachers should experience teaching methods as teachers and as learners to understand the nuances that come with pedagogy.

Coupled with the experiences that beginning teachers gain from learning on the job are the reflective practices that could be seamlessly integrated in their work (Dana & Yendol-Hoppey, 2009). This notion suggests that it behooves professional development facilitators to carve out time for beginning teachers to engage in purposeful reflection (Feiman-Nemser, 2007). According to Merriam et al. (2007), a benefit of reflection is the ability to move backward and forward in complex situations that require sound judgments. Drawing on the work of York-Barr, Sommers, Ghere, & Monte (2001), Dana and Yendol-Hoppey (2009) offer a more inclusive definition, which characterizes reflective practice as an act of deliberate pause that creates open perspectives and higher level thinking processes, enabling deeper understandings of behavior, skills and attitudes toward the goal of student achievement.

The literature clearly notes that reflection can occur on action; that is, “thinking through a situation after it has happened” (Merriam et al., 2007, p.174) or in action; that is, suddenly becoming aware of a new understanding of a previously held notion (Schon, 1987). Both types of reflection are relevant to the beginning teachers’ induction experience and readily occur when
they engage in teacher inquiry or action research (Giles et al., 2010). Since these activities take place in the context of the workplace, they form the basis of job-embedded professional development and conveniently fill the gap that teachers face from theory to practice (Feiman-Nemser, 2012b).

**The Role of Induction Programs**

**Overview.** Framed as “the transition from pre-service preparation to practice,” induction, as posited by Feiman-Nemser (2001), “brings a shift in role orientation and an epistemological move from knowing about teaching through formal study to knowing how to teach by confronting the day-to-day challenges” (p.1027). The subject of effectiveness of induction programs is a growing area of research, but so far, there is limited information in the literature on whether or not induction programs are beneficial to teachers and truly impact student achievement (Fry, 2007). Fry’s (2007) contention is that induction programs tend to be mediocre quality, and there is a lack of consistent monitoring by school leaders to support their improvement. She also argues that induction programs are inclined to lack differentiation, which is a necessary element for its success.

Moreover, once the induction period is over, beginning teachers may still need continued support in the form of collaboration and authentic professional development for the challenges that will present themselves each year (Smith & Ingersoll, 2004). In a longitudinal induction report, Smith et al. (2012) report that over the past few decades, the need for high teacher quality and retention have spurred the expansion of induction activities. Nevertheless, induction without the proper infrastructures may be self-defeating. Researchers also assert that, although beginning teachers face unique challenges during the induction period, they are held responsible for demonstrating classroom management, providing high quality content, while ensuring order and
safety (Smith et al., 2012; Feiman-Nemser, 2001). Statistics indicate that 8 out of 10 beginning teachers in 1999-2000 participated in an induction program but little is known about whether and how these programs helped these novices improve their practice (Smith et al., 2012).

In a later study Smith et al. (2012), “found that even when program supports for new teachers were intensive, frequent, and highly regarded, a poor school climate and weak leadership could undermine the [induction] program” (p. 225). In addition, if administrative support and leadership are lacking, the beginning teacher might not experience professional growth (Feiman-Nemser, 2012; Breaux & Wong, 2003). Given these shortfalls, teacher educators and professional developers call for a sustained system of professional learning with job-embedded features that set the stage for educators’ lifelong learning and shifting paradigms (Drago-Severson, 2009; Zhao, 2010).

Nevertheless, there are documented benefits that accrue from induction. Although induction programs vary in duration of term and number of services, many offer teachers the opportunity to collaborate with a mentor for support (Huling et al., 2012), and in some cases, participate in action research as a component of formative assessment (Smith & Ingersoll, 2004). According to policy paper writers from the University of California, Santa Cruz’s New Teacher Center, “Today, 27 states require new teachers to participate in some form of induction or mentoring and, as a result, more new teachers receive mentoring or induction support than ever before” (Goldrick, Osta, Barlin, & Burn, 2012, p.iii). The goal is to provide beginning teachers a strong transitional experience via an effective induction program that seamlessly bridges pre-service to professional practice.

**Features of effective induction programs.** The literature on induction programs indicates multifaceted approaches to their design and models, resulting in variations of
effectiveness for beginning teachers (Bartlett & Johnson, 2010). Although all induction programs have the intent of supporting new teachers, some have emphasis on retention, whereas others pursue long term teacher efficacy that goes beyond the induction period (Bickmore & Bickmore, 2010). Research on the components that comprise effective induction is still growing.

One leading component of a successful induction program is mentorship, since it is often deemed the mechanism by which beginning teachers learn and grow from their veteran peers (Kane & Francis, 2013). However, mentoring can range from an informal buddy system to full-time release mentor teacher assignments designed to enable consistent support for the beginning teacher (Bartlett & Johnson, 2010). Another contributing effective component is the administrative structure of the program—its management, and policies that govern delivery. An induction program can be hosted independently by a school district as a local education agency without a state mandate, or an induction program can operate under the guidelines of a state-mandated program that is linked to credentialing (Bartlett & Johnson, 2013). In both instances, induction programs may or may not liaise with a university. This variability of structure across geographic domains increases the complexity that researchers encounter when measuring an induction program’s overall effectiveness (Bartlett & Johnson, 2010).

Whereas the definition of “effective induction” has multiple interpretations, such as “a systematic process embedded in a healthy school climate that meets new teachers’ personal and professional needs” (Bickmore & Bickmore, 2010, p. 1006) and “a more or less planned and formalized arrangement in which beginning teachers are assisted and supported in becoming competent and effective professionals” (Maulana, Helms-Lorenz & Van de Grift, 2015, p. 228), the literature highlights features from exemplary induction programs that run the gamut internationally. In a review of ten papers from scholars and practitioners who have led research
in the induction arena, such as Darling-Hammond, Chung Wei, Andree, Richardson, & Orphanos (2009); Fulton, Yoon & Lee (2005); Moskowitz & Stephens (1997); Serpell (2000); Organisation of Economic Cooperation and Development (2005); Department of Education Science and Training (DEST) (2002, 2003); Smith and Ingersoll (2004); and Wood & Stanulis (2009), Kearney (2014) identified eight characteristics of effective induction, deemed as such due to measured retention rates and levels of support received by the research participants.

The effective characteristics include “provision of a mentor; opportunities for collaboration; implementation of structured observations; reduced teaching and/or time release for the beginning teacher; teacher evaluation; opportunities for professional discussions and/or communication; professional support and/or professional networking; and continuing professional development” (Kearney, 2014, p. 7). Notably, not all studies portrayed the same characteristics. For example, only the DEST study indicated that all of the effective characteristics were present in the induction programs that it reviewed. The presence of a mentor had 100% representation in all studies, but collaboration, professional support/networking, and part of a formal professional development program ranked 80% across the studies. The lowest ranked feature was formal evaluation of the program, which ranked 30% (Kearney, 2014).

Outside of the United States, a number of countries have emerged in the literature as having effective induction programs, defined by the retention and success of their beginning teachers (Kearney, 2014). Notably, Japan, for example, spends approximately US $220 million per year, and characterizes its induction program by participants’ engagement in action research projects, culminating in a 30-40 page report on a topic of choice (Kearney, 2014). Switzerland creates cohorts at the pre-service level and continues the induction training in the teachers’ schools of employment (Fulton et al., 2006; Howe, 2006). Germany and France operate their
induction programs by using an apprentice style system, whereby teachers teach and study simultaneously (Howe, 2006; Wong, 2005).

Two United States induction programs that are well-documented in the literature include California’s Beginning Teacher Support and Assessment (BTSA) (Yusko & Feiman-Nemser, 2008; Fulton et al., 2005; Darling-Hammond, 2007) and Connecticut’s Beginning Educator Support and Training (BEST) program (Kearney, 2015; Fulton et al., 2005; Carver & Feiman-Nemser, 2009). BTSA, now re-named California Teacher Induction (CATI) (CTC, 2014), is noted for its emphasis on formative assessment (Feiman-Nemser, 2008) and retention rate (Fulton, 2005; Smith & Ingersoll, 2004; Darling-Hammond, 2007; Ingersoll, 2012). BEST, now replaced with Teacher and Educator Mentoring (TEAM) (McQuillan, 2010), is noted for its induction assessment component (Carver & Feiman-Nemser, 2009) and enhancement of new teacher effectiveness (Darling-Hammond, 2007).

Regardless of the disparity in factors that contribute to the effectiveness of induction programs, there is consensus in the literature that induction matters and is essential for teacher development, given its relevance to retention and teacher satisfaction (Bartlett & Johnson, 2010; Yusko & Feiman-Nemser, 2008; Ingersoll, 2012). As one takes a closer look at induction program design, it is clear that emphasis on personal and professional needs is the foundation for development and growth (Gold, 1996).

**Frameworks for mapping or continuum of learning.** Formal induction programs that lean toward self-empowerment of beginning teachers engage in practices that utilize conceptual frameworks as mental models in which the teachers situate their learning and teaching practices (Ginns, Heirdshield, Atweh & Watters, 2001). These models tend to serve as a continuum (Feiman-Nemser, 2001) or a road map (Danielson, 2007) in which teachers identify benchmarks
of their progress and engage in reflective practices for self-discovery and evaluation. As Kane and Francis (2013) posit, beginning teachers encounter the paradox of having to take responsibility for the classroom and vision for their professional practice while they acquire knowledge of students, policies, curriculum, learning community, and their sense of self as a professional. Hence, a conceptual framework provides the lens through which they can structure how all of these goals will be accomplished.

A number of frameworks for teaching and learning used with beginning teachers are documented in the literature. For example, Feiman-Nemser’s *Central Tasks of Learning to Teach* model begins at the pre-service level through induction and extends to continuing professional development. During induction, the beginning teachers learn the context of their teaching environment, such as students, curriculum, and community during their initial phase. This is followed by the design of a responsive instructional program, creating a classroom learning community, and enacting a beginning repertoire (Kane & Francis, 2013).

In their quest to assist school leaders with a local induction program, Birkeland and Feiman-Nemser (2012) designed a six-element comprehensive induction program that included: a committed school leadership; an early, information-rich hiring process; summer preparation and formal orientation; complete curricula and supporting materials; opportunities to learn with and from colleagues; and growth-oriented supervision and transparent rehiring process. Another framework, authored by Charlotte Danielson (2009) categorizes complex teaching activities into four domains: *Planning and Preparation, The Classroom Environment, Instruction* and *Professional Responsibilities*. Notably, the framework is not limited to beginning teachers, but can serve as a roadmap to understand the nuances of teaching.
Since the structure of induction programs differs, conceptual models may be developed by an individual entity, such as a school district, county of education office, or state department, or it may be multi-tiered among a number of agencies. In a multi-tiered, collaborative, beginning teacher inquiry project (faculty of education, a provincial organization and six local education agencies) for a teacher induction program, narrative-based writing was selected as the tool for implementing induction among beginning teachers and their mentors (Smith & Engenmann, 2015). The project included four dimensions, designed to support “individual and collegial investigations into professional practice” (p.157). The process was based on a cyclical framework which began with their experience, followed by reflection, analysis, synthesis, then numerous repetitions throughout the elements (Smith & Engenmann, 2015).

In a separate school district, aligned with a similar structure of conceptual framing, a local mandate purposely crafted its induction program with the theme of differentiated professional learning (Molitor, Burkett, Cunningham, Dell & Presta, 2014). Hence, the district’s induction conceptual cycle begins with a responsible Plan with Guiding Principles designated to sustain new teacher professional learning, such as pedagogy, and school board and department initiatives (Molitor et al., 2014). These principles are bolstered by Differentiated Support in which teachers choose professional learning opportunities and receive in-school support (Molitor et al., 2014). This support enacts Building Capacity and with on-going feedback from teachers in the form of exit tickets, web-based surveys, video testimonials and focus groups, teachers engage in Reflection (Molitor et al., 2014). The feedback that the induction participants provide enables revision of existing professional learning opportunities and development of new opportunities. These modifications enable program Review, Revision and Refinement and the process continues over time (Molitor et al., 2014).
Given the frameworks with which various entities implement induction, professional learning and development become an iterative cycle. Therefore, this cycle must synchronize with the beginning teachers’ backgrounds, knowledge, and experiential learning. This process can be manifested in the pathway of teacher inquiry (Clayton, 2012; Dana & Yendol-Hoppey, 2009; Fry, 2007; Snyder, 2012). The literature review now turns to an analysis of teacher-inquiry or action research as job-embedded professional development and the role it can play in the lives of beginning teachers toward their professional learning and growth.

**Teacher Inquiry or Action Research as Job-Embedded Professional Development**

Commonly known in the education arena as “teacher inquiry” or “teacher research,” the term “action research,” was coined by Kurt Lewin as far back as 1946 (Hodgkinson, 1957), and can be defined as “research undertaken by those in the field (teachers, administrators, and supervisors) in order to improve their own practices” (p. 137). When given an opportunity to engage in action research, teachers participate in job-embedded professional development that is applicable to their instructional setting and relevant to the context of teaching and learning.

In their seminal work on teacher research, Cochran-Smith and Lytle (1993) defined the term teacher research as “systemic intentional inquiry by teachers about their own school and classroom work” (p. 23). Cochran-Smith and Lytle (1993) further offered two schools of thought. Pulling from pioneer education action researcher, Corey (1953), they cite his emphasis on the value of increasing teacher effectiveness in similar situations multiple times, rather than extending generalizations across other educational contexts. On the contrary, Schafer (1967) posed a more global perspective, asserting that with teachers’ engagement in inquiry projects, “schools could be organized as centers of inquiry” (p. 24).
Beginning teachers’ pathway through inquiry. In preparing teacher candidates for their debut to professional instructional practice, the literature catalogs a number of teacher education programs that incorporate action research into field experiences (for example, Smith & Sela, 2005; Hagevik, Aydeniz & Rowell, 2012). Smith and Sela (2005) offer a number of researchers’ perceived advantages of action research as a bridge to successful professional practice and an essential component of beginning teachers’ professional development. For example, Altrichter (1993) advocates for its ability to improve teaching and learning while supporting teachers and giving them voices; Lederman & Niess (1997); Winter (1998); Valli (2000); Tricoglus (2001); and Goodnough (2003) advocate for bridging the gap between theory and practice, a gesture that brings teachers into the fold of meaningful research, and adds to the education profession. In addition, Cochran-Smith and Lytle (1993) highlight the notion that the role of teachers is not limited to the role of technicians, but “transmitter of knower and agent” (p. 295). In other words, teachers are bearers of knowledge who serve as agents to students. These perceived advantages appear significant toward the development of teacher efficacy.

Limitations of teacher inquiry in pre-service practice. The literature on student teachers’ exposure to teacher inquiry (for example, Lawrence & Butler, 2010; Volk, 2010) indicates that pre-service action research is insufficient to prepare teachers for their own classrooms. The primary reason is the tendency for student teachers to experience disconnectedness between themselves and the master teachers’ students due to the temporary nature of the field experience. In addition, there is often a lack of collegiality between the student teachers and site faculty, stemming from their low position on the professional hierarchy (Lawrence & Butler, 2010; Volk, 2010). Furthermore, they are unable to readily access resources, since they are not a member of the permanent staff. Therefore, it is imperative that
during the formal entrance to the education arena, teachers receive specific protocols to engage them in action research during the induction or bridge phase, providing a solid learning tool that takes them from pre-service to professional practice (Christensen, Slutsky, Bendau, Covert, Dyer, Risko & Johnston, 2002).

**Facilitating teacher inquiry during in-service.** The literature shows that the responsibility to implement teacher inquiry tools lies with administrators and teacher mentors as they come to terms with the context for teaching and learning in which beginning teachers function (Smith & Sela, 2005, Feiman-Nemser, 2012a). It is crucial that they facilitate and support the inquiry process that enables teachers to examine what works and what needs improvement in the classroom (Bieler, 2012). Their guidance during the inquiry process can help teachers identify student needs and assess achievement gaps within their classrooms, as they become equipped to develop their own research questions (Christensen et al., 2002). The corresponding results can later enable them to modify instructional strategies, re-assess students’ needs, and repeat the process in a cyclical manner (Dana & Yendol-Hoppey, 2009).

Teacher inquiry, as the literature reveals, works best when collaboratively designed (Butler & Schnellert, 2012); that is, beginning teachers partner with others who are also pursuing solutions to problems that they share. In this instance, they can brainstorm ideas, identify resources, and reflect on the outcomes, modeling many of the experiential traits deemed valuable for their students (Harrison, Dymoke & Pell, 2006). Action research then becomes an act of collaborative and collegial inquiry, connecting teachers across varying degrees of instructional experience, grade levels and content areas to contribute their findings toward a community of practice, while bolstering their own lifelong professional learning (Drago-Severson, 2009).
**Action research in induction.** Immersing beginning teachers in action research projects provides them with the experience to foster and develop control over their own professional growth (Ginns et al., 2001). Action research also empowers beginning teachers to “seek deep understandings of practice, assert control over their own situation, develop decision making processes designed to enhance the effectiveness of their own teaching and encourage critical reflection on practice” (Ginns et al., 2001, p. 3). Therefore, a growing body of research continues to demonstrate its effectiveness during the induction phase.

Two states (previously mentioned for their effective induction practices)—California and Connecticut—include action research components in their induction standards, which reveal that teachers are given opportunities to engage in inquiry-based activities (Goldrick, et al., 2012). California beginning teachers work with a trained support provider to “create and implement an action plan, reflect on collected evidence and apply new learning to future practice” (Commission on Teacher Credentialing and the California Department of Education [CTC and CDE], 2014). In Connecticut’s Teacher and Education Mentoring (TEAM) program, which replaced the BEST program in 2010, teachers are required to identify indicators relevant to their classroom practice on student learning and develop a professional growth goal with corresponding action steps to accomplish it within 8–10 weeks (Connecticut State Department of Education, 2013).

Researchers recommend action research as a best practice in induction because of its “learning in practice approach” (Feiman-Nemser, 2001; Algozzine et al., 2013; Snyder, 2012). Emphasis is given to the context in which teachers teach and students learn. For example, upon examining the learning styles of students, their backgrounds, and temperament, teachers can make sense of their environments by “turning confusions into questions, trying something out..."
and studying the effects” (Feiman-Nemser, 2001, p.1030). As the beginning teachers work with a mentor during the induction phase, they are able to reflect on their new learning and receive feedback toward improvement of their practice (Nielsen, Barry & Addison, 2007).

**Relationship between teacher inquiry and professional growth.** At the core, action research can serve as a paradigm for achieving social change (Hodgkinson, 1957). Bargal (2008) postulates that action research engages both the researcher and the participants, avoiding the neutral stance, often taken in positivistic approaches; his contrasting view distinguishes this inquiry process from other social science research in its emphasis on arriving at practical solutions to problems experienced within communities. Similarly, Schoen (2007) suggests that action research as a determination and exploration of issues to identify resolution is a model for professional socialization and growth.

In defining the relationship between action research or teacher inquiry and teacher professional growth, Dana and Yendol-Hoppey (2009) quoted one of the teachers with whom they collaborated, capturing the essence of the psychological impact of teacher inquiry:

Very simply put, inquiry is a way for me to continue growing as a teacher. Before I became involved in inquiry, I’d gotten to the point where I’d go to an in-service and shut off my brain. Most of the teachers I know have been at the same place. If you have been around at all you know that most in-services are the same cheese—just prepackaged. Inquiry lets me choose my own growth and give me tools to validate or jettison my ideas (p.6).

The literature is rich with accomplishments of beginning teachers who cite teacher inquiry as the trajectory to maturity, self-assuredness and stabilization (Schoen, 2007; Wall Higgins, Glasner, Mahmout, & Gormally, 2009; Cullen, Ackerson & Hansen, 2010; Giles,
Wilson, & Elisa, 2010). As beginning teachers complete the induction phase, researchers posit that their professional development advances to higher heights (Neilsen et al., 2007; Thompson & Zeuli, 1999). They contend that for maturing teachers, professional development can be defined as an expansion of collective growth within the teaching profession. Skills learned during induction and in the post-induction phase go well beyond teacher preparation and are the tools that beginning teachers will take with them as the educational landscape adapts to political changes, emerging technologies and varying governance (Darling-Hammond, 2010).

**Transitioning to Common Core**

As mentioned earlier, Fallon (2010) characterizes the transition to Common Core as the Golden Age of Teacher Education. He argues that “Teacher education is entering an era of intense intellectual inquiry, scientific investigation and rapid advancement” (p. 34) and further declares that “teachers need time to experiment and fail so they can learn” (p. 35). The literature on beginning teachers’ experience with Common Core, however, is sparse (Zhang, 2015), since implementation in school districts currently averages three to four years. Nevertheless, reports from institutions of higher education and studies from a small number of researchers are currently emerging.

Institutions of higher education are actively pursuing methodologies to prepare their teacher candidates for the shifts in these standards. The University of California, Davis, for example, earnestly reports embracing critical and reflective practices within their teacher education curriculum and provides experiential learning opportunities for these candidates to experience pedagogical practices with veteran teachers in real classrooms (Levine, 2014). The college dean declares that teacher education that is situated within real-life practice counts as
effective preparation for the complex contemporary demands of instructional practice and the Common Core (Levine, 2014).

Beginning teachers’ challenges of implementing the Common Core appear to originate from a confusion of the language and application to content areas (Zhang, 2014). Coupled with classroom management deficiencies, teachers are unable to remain creative and actively engage their students while integrating the standards (Zhang, 2014; Saylor & Kerhoff, 2014). In addition, the teachers report on a scarcity of resources, since formal materials for course work were not readily available (Zhang, 2014; Saylor & Kerhoff, 2014). Upon finding substantial dissatisfaction among the beginning teacher participants of the study, the researchers recommend that teacher preparation and induction programs allow significant practice with the standards through the framework of teacher inquiry and collaboration (Zhang, 2014; Saylor & Kerhoff, 2014).

Advocates of Common Core Standards urge for beginning teachers’ experimentation with real world projects that align with the standards. Darling-Hammond (2010), for example, pushes for teacher inquiry or action research in this reform effort. She believes in giving teachers the opportunity to experiment, as it were, with new practices and learning from their experiences regarding what works and what is not effective throughout various cycles of the experimentation. She further contends that with a skilled mentor by their side, these teachers are able to manage their classrooms more efficiently and make the necessary connections for student engagement, including establishing instructional practices that are culturally and linguistically relevant.

**Summation**

Based on the need to facilitate beginning teachers as adult learners and the philosophical justifications for action research or teacher inquiry as a paradigm shift for professional learning,
it is clear that teachers can experience substantial gains in mapping their own transformation and professional growth during induction (Dana & Yendol-Hoppy, 2009). As the literature indicates, teacher professional development is static at times and lacks the potential to support shifting paradigms that are essential for the knowledge-based economy (Fletcher, 2012; Marongelle et al., 2013; Vecellio, 2013). Similarly, there is a wide array of empirical research which concludes that a revitalization of professional development effort is necessary for teaching and learning to bolster student achievement (Fallon, 2012).

The research suggests that inquiry-based practices or action research can provide the foundation for lifelong professional learning (Butler & Schnellert, 2012; Ahn, 2014). Various examples from the field substantiated the premise: Teachers learn and grow within the contexts of their instructional practice (Cullen et al., 2010; Schoen, 2007; Wall et al, 2009; Ross & Bruce., 2012). In an increasingly globalized world, coupled with a transition to national core standards, it is imperative that educators and public agencies recognize the importance and relevance of action research to instructional practice as a catalyst for professional learning and growth (Birkeland & Feiman-Nemser, 2012; Fallon, 2012; Ross & Bruce, 2012). The call to consider teaching and learning as a futuristic endeavor supports the need for global competitiveness in an increasingly dynamic world (Zhao, 2010; Darling-Hammond, 2010).

Given the proposed call for teacher empowerment via action research during shifting paradigms and its sustenance, monitoring, and support, the literature weighs heavily on the side of inquiry as a powerful foundation for continued learning and professional growth (Dana & Yendol-Hoppey, 2009; Reeves, 2010; Cullen et al., 2010; Schoen, 2007; Wall et al, 2009; Ross & Bruce., 2012). Evidence, in a number of studies previously referenced in the literary collection, supports the claim of improvement in student achievement when teachers
conscientiously engage in inquiry-based practices (for example, Feiman-Nemser, 2012; Ross & Bruce, 2007). Other studies indicate parallels in the inquiry-based skills that teachers need with critical thinking skills that students should acquire for the twenty-first century (for example, Vecello, 2013; Ball & Forzani, 2011; Marrongelle et al., 2013).

Induction programs play a major role in the beginning teacher’s transition from the pre-service to in-service phase. Whereas effectiveness is difficult to measure across induction programs, there is consensus on specific features that tend to generate success, such as mentoring, individualization of a professional learning plan, supportive school climate, inquiry, and reflection (Smith & Engenmann, 2015; Feiman-Nemser, 2012; Ross & Bruce, 2007). On the international front, exemplary induction programs have demonstrated that when properly implemented, there can be tremendous success with retention, resilience, and continued professional learning (Kearney, 2014).

As teachers pursue lifelong learning and facilitate students in this venture, school administrators might consider actionable pathways to develop and support them (Jenkins & Pfeifer, 2012). More research needs to be conducted in this area to identify administrative practices that can sustain and empower teachers to attain greater professional competencies in action research (Smith & Addison, 2013). The literary collection was sparse on systemic oversight and support of inquiry-based practices as the foundation for professional learning in Common Core State Standards; additional data at the administrative levels could prove beneficial to the academic community at large.
Chapter III: Methodology

The purpose of this research was to gain insight into the impact of a beginning teacher induction program during Common Core implementation in a California suburban high school district. The overarching research question that underpinned the research was as follows: What is the induction experience for beginning teachers during the implementation of Common Core Standards in a California suburban high school district?

To support the overarching question, two sub-questions followed:

1. What are the beginning teachers’ perceptions of job-embedded, professional learning?
2. How are the needs of beginning teachers as experiential learners met or (not met) in the induction program?

The selected methodology for this qualitative research project was case study. Yin (2014) purports that “case study research arises out of the desire to understand complex social phenomena” that “allows investigators to focus on a ‘case’ and retain a holistic and real-world perspective—such as …small group behavior [and] organizational and managerial processes…” (p. 4). This methodology was relevant to the study because it explored the experiences of the targeted participants within the context (Baxter & Jack, 2008) of the school district’s induction program, toward the greater goal of systemic professional learning. As such, multiple sources of data could be analyzed, namely, “interviews, direct observations, participant-observations, and physical artifacts” (Creswell, 2007, p.75). Voices of the participants were heard and the breadth and depth of their experiences can contribute to the greater education community.

Research Paradigm and Methodology

The research paradigm which undergirded this study was interpretivism. While great strength can be found in other methods, such as a critical ideological stance by virtue of
participant empowerment (Freire, 1970; Giroux, 1986; Ladson-Billings, 1995), or a post-positivistic stance by virtue of a “verifiable truth” (Ponterotto, 2005), the interpretivism paradigm “hold[s] that reality is constructed in the mind of the individual, rather than it being an externally singular entity” (Ponterotto, 2005, p.129). This heuristic feature aligned with the study’s research questions, given the study’s purpose to gain insight into the lives of beginning teachers.

Butin’s (2010) description of reality under interpretivism aptly portrayed the manner in which the researcher anticipated participants’ authentic responses to the interview questions. According to Butin (2010), “Reality is intersubjective in that it is socially constructed, such that it can be described and represented through diverse perspectives” (p. 59). Therefore, under interpretivism, participants were likely to come to terms with their own meaning over time, allowing them to decide the extent to which they conveyed their experiences and advocated for themselves (Merriam, 2009). During the interviews, the researcher’s goal was to capitalize on the participants’ meaning-making and self-advocacy.

Since the research questions sought to discover the experiences of beginning teachers during the era of the Common Core, the aim of the study was to elicit their wonderings, experimentation, and evaluation (Poekert, 2010) during this instructional shift. A post-positivistic approach could have measured several aspects of this same question, such as number of trainings received, strategies implemented, and student assessment results, but might not have probed the inner world of teacher reflection, collaboration and inquiry (Ponterotto, 2005). Similarly, a critical ideological stance might prove too overpowering for beginning teachers during the preliminary, vulnerable phase of their career. An interpretivist approach, on the other
hand, enabled interaction, dialogue and reflection between both participants and researcher in a co-constructive partnership (Ponterotto, 2005).

**Research Design**

This research study was designed within the parameters of qualitative theory. Guba and Lincoln (1994) and Ponterotto (2005) subscribe to the richness of qualitative theory in that it maintains context, includes meaning and purpose, merges grand theories with local context, applies to individual cases, and includes discovery dimension in inquiry. Despite the “hard” reputation of quantitative research (Guba & Lincoln, 1994), respected qualitative researchers argue that the nuances and depth of detail embedded in the findings from qualitative research lend as much value as the results of a hypothetical proposal in quantitative research (Creswell, 2007). The qualitative design was selected for this research project to elicit and report on beginning teachers’ experiences as expressed from their authentic points of view.

Moreover, given that the researcher was a participant observer in this inquiry (Creswell, 2007), the opportunity to probe deeply into the environment of which the researcher is tremendously familiar presented a powerful match for mining the benefits of qualitative research (Merriam, 1998). The researcher was therefore not limited to a single, “verifiable” quantitative truth; instead, the scope of understanding the phenomenon in question was widened to include feelings, emotions and sensitivities that touched the participants’ lives (Birks, Chapman, & Francis, 2008).

**Research Tradition**

A case study approach was used to address the phenomenon of beginning teachers’ induction experiences during the era of Common Core implementation. The case study research method has held a long tradition in the social sciences, particularly in psychology, political
science, anthropology and sociology, along with medicine and law (Creswell, 2007). Its key feature lies in the method of conducting an inquiry from the stance of a bounded system (one case) or multiple bounded systems (multi-site study) (Creswell, 2007). Two seminal theorists of the case study tradition are Stake (1995) and Yin (2008). Both agree on the setting and context which characterize case study. However, Stake’s position is that case study is not a methodology; instead, he deems it a particular thing or choice to be studied within a bounded system (Creswell, 2007).

The Stake-Yin distinctions in case study continue further with differing classifications by which the case can be approached. Stake classifies cases into the categories of intrinsic, instrumental and collective (Baxter & Jack, 2008). Intrinsic case studies, as Stake postulates, are conducted when there is a genuine interest in the case for the sake of content knowledge and do not go beyond understanding an abstract construct or generic phenomenon (Baxter & Jack, 2008). Instrumental case studies provide insight or refine theories, and collective case studies, as the name implies, refer to multiple cases (Baxter & Jack, 2008).

Conversely, Yin (2014) classifies case studies into explanatory, exploratory and descriptive categories. In defining the purposes for each category, Yin (2014) postulates that explanatory case study explains the emergence of a condition, exploratory case study identifies potential research questions for a future study, and descriptive case study describes a phenomenon within its real world context.

An additional case study theorist, Sharan Merriam (1998), identifies with elements from both Stake and Yin toward the focus of qualitative research in education, but given her constructivist stance, leans more toward Stake’s tenets of boundedness and integration in the principles of case study research (Yazan, 2015). Merriam (1998) contends that “Educational
processes, problems, and programs can be examined to bring about understanding that, in turn, can affect and perhaps even improve practice” (p.41). She argues further that “Case study has proven particularly useful for studying educational innovations, for evaluating programs, and for informing policy” (p.41). Merriam’s eclectic approach to case study strongly aligned with this research study’s case of beginning teachers in an induction program, since the case was of great relevance to the school district in which it is embedded.

Elements of Stake’s instrumentality and Yin’s descriptive categories were explored. According to Yin (2014), a descriptive case study is typical of an intervention within its contextual setting. This was aligned with the research study, in that the life experiences of teacher participants in which the case was embedded were explored as a phenomenon that combined induction with a paradigmatic shift. The researcher obtained close-up access to participants’ perceptions of their professional learning experiences along with relevant mentor-recorded classroom observations and artifacts. Similarly, Stake’s (1995) instrumental case type brought the element of insight to the fore, in that the case was explored as a means to acquire knowledge about professional learning of teachers, starting at the beginning phase of their career. As Baxter and Jack (2008) explain, “The [instrumental] case is often looked at in depth, its contexts scrutinized, its ordinary activities detailed, and because it helps the researcher pursue the external interest” (p. 549). These elements held true throughout the course of the study.

Rationale for Choosing Case Study

Case study was chosen as the methodology for the research study to address a single “case” of beginning teachers within their induction program as opposed to a wider population of teachers with no set boundaries. Using this approach, the voices of a single set of beginning teachers in a specific location—suburban district in California—came to light. Targeting a
particular teacher induction program as a case bore the advantage of “investigating complex social units consisting of multiple variables of potential importance in understanding the phenomenon. Anchored in real life situations, the case study results in a rich and holistic account of [the] phenomenon” (Merriam, 1998, p. 41). Teacher induction is a complex process and the beginning teachers who participated in the study are constantly faced with numerous circumstances that may either impede or enhance their instructional practice (Darling-Hammond, 2010). Couple the induction experience with the curriculum paradigm shift of Common Core State Standards, and the impact is likely to shape the beginning teachers’ professional learning experiences in a consequential manner (Kesson & Henderson, 2010). The case study approach provided an array of potential data collection sources. Yin (2014) offers six specific types: documentation, archival records, direct observations, participant observation and physical artifacts—most of which were utilized in this research study.

**Site and Participants**

**Site.** The study was conducted within a secondary level, suburban school district in California. The district houses eight comprehensive high schools, an early college high school, and a few alternative high schools, serving altogether approximately 24,000 students. The instructional staff is comprised of approximately 1,000 teachers, managed by over 65 site administrators. The executive arm of the district is comprised of the school board, superintendent, and cabinet, which operates from the central office. The central office is staffed with four divisions: educational services, student services, personnel services, and business services. Beginning teacher induction is administered within the educational services division and organized by a full-time induction and professional development coordinator. Teachers from all school sites with preliminary credentials in a single subject or multiple subject as well as
special education are eligible to participate in the district’s state accredited induction program at no cost to them.

Of the nine high schools (all names are fictitious) in the district, five schools were represented in the study. Four of the ten participants came from Aardvark, three from Armadillo, one from Meerkat, one from Macaw, and the other from Venus.

Table 1

<table>
<thead>
<tr>
<th>Name of School*</th>
<th>Name of Participant*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aardvark High School</td>
<td>Charles</td>
</tr>
<tr>
<td></td>
<td>Fred</td>
</tr>
<tr>
<td></td>
<td>Lucy</td>
</tr>
<tr>
<td></td>
<td>Valerie</td>
</tr>
<tr>
<td>Armadillo High School</td>
<td>Carmen</td>
</tr>
<tr>
<td></td>
<td>Tim</td>
</tr>
<tr>
<td></td>
<td>Winston</td>
</tr>
<tr>
<td>Meerkat High School</td>
<td>Ashton</td>
</tr>
<tr>
<td>Macaw High School</td>
<td>Emily</td>
</tr>
<tr>
<td>Venus High School</td>
<td>Nancy</td>
</tr>
</tbody>
</table>

*Fictitious name

**Participants.** The participants for the study originated from a pool of former beginning teachers across the district that completed the district’s induction program within the last two years, during the implementation phase of Common Core standards. The participants’ induction completion status was essential to the research, since time has elapsed and the teachers have had an opportunity to experience the impact of their induction experiences. In an effort to provide context to the study, some background information on the participants follows.

**Background Profile.** Beginning teachers who enter the induction program are of two types: (1) a first year teacher who has completed a teacher education university program, inclusive of student teaching; and (2) a previous intern, hired without teaching experience but
who had attended a teacher preparation program during the first one or two years of teaching. In the first scenario, the beginning teacher worked with a cooperating or master teacher as a mentor. In the second scenario, the beginning teacher had an intern coach—an on-site teacher from whom he or she received limited guidance. An intern teacher may also be one who entered the ranks as an emergency permit holder or who had worked as a substitute teacher. Regardless of scenario, teachers of both types entered the induction process as “beginning teacher” and were paired with mentors, known in the program as a support provider. Both types of beginning teachers were included in this study because of their participation in the induction program.

**Place in Professional Hierarchy.** The social status of the beginning teachers’ post-induction level is also of relevance to the participants’ description. Hierarchically, the participants have moved up the career ladder, since they completed their two induction years and traded in their preliminary credential for a clear one. Accordingly, they are no longer practicing under provisional status, but have acquired tenure and have joined the ranks of “veteran” teachers. While not a senior in status by any means, they have garnered a modicum of respect by virtue of their survival through the tough, initial beginning years. Within the potential group of participants, one can readily find a small number who have attained teacher leadership positions, such as department chairperson and instructional coach. Others are on the upward mobility path by virtue of being team members on Common Core instructional curriculum planning teams.

**Induction program.** The district’s induction program is a California Commission on Teacher Credentialing (CTC) accredited entity that the district sponsors in its goal to increase student achievement by retaining high quality beginning teachers. Beginning teachers in the district’s induction program engage in the California-adopted, research-based, job-embedded professional development system called *Formative Assessment System for California Teachers*
(FACT) driven by the *California Standards for the Teaching Profession* (CSTP). Organized within categories of teaching practice, the teaching standards include: “engaging and supporting all students in learning, creating and maintaining effective environments for student learning, understanding and organizing subject matter for student learning, planning instruction and designing learning experiences for all students, assessing student learning, and developing as a professional educator” (State of California, 2012). Coupled with the CSTP is a Continuum of Teaching Practice (2012) that serves as a self-reflective tool for the beginning teachers to rank their competence over time. The continuum bands include: emerging, exploring, applying, integrating, and innovating.

FACT is comprised of four modules: Module A: The Context for Teaching and Learning, Module B: Assessment of Teaching and Learning, Module C: Inquiry into Teaching and Learning, and Module D: Summary of Teaching and Learning. The purpose of Module A is to assist teachers with learning how environmental factors, such as socio-economics, language, culture, and community resources impact students’ academic development (California Induction, 2014). Module B provides reflective tools for the teacher to assess their instructional skills and lay the groundwork for initial classroom observations by their support providers (mentors) with corresponding reflective conversations. Module C is considered the heart of the induction program, in that it is data-driven and establishes questions, domains, action plans, outcomes and reflections for action-research and inquiry into teaching and learning. Module D serves as a reflective summary of student achievement, personal and professional growth, and future aspirations. A graphic representation of all four modules and their two-year cyclical flow appear in Figure 3.
Beginning teachers in the program, known as “participating teachers” or PTs, deliver curriculum that aligns with Common Core State Standards, and curriculum frameworks. Data collected during FACT module activities include lesson plans, student work, assessments, mentor-recorded, classroom observations and reflections. Evidence of the CSTP and Induction Standards is generated as FACT modules are completed. These evidence pieces provide the focus for reflective conversations between support providers and participating teachers and are used to demonstrate adherence to California standards-based instruction. Evidence from the FACT modules is assembled in an induction portfolio, maintained in hard copy or online format. Formal reviews of the portfolios are conducted twice per year in order to track recorded progress of professional growth and to secure documentation for clearing the teaching credential.

Beginning teachers who participated in the induction program brought considerable attributes to the study. Firstly, they have participated in at least two cycles of inquiry that
included action research methods of professional development. Under a formative assessment system, they amassed information about their student population, such as demographics, academic performance, learning styles, and disabilities, if any. This enabled great awareness of the teachers’ context for teaching and learning as set forth by the first module in the Plan-Teach-Reflect-Apply of the induction system (California Induction, 2012).

Armed with background knowledge of their student population, they transitioned to the second phase—the assessment of teaching and learning. Here, they critically assessed their instructional practices and decided on an area in which their mentor would observe and record findings on areas of concern. Thirdly, following reflective conversations with their mentors, the beginning teachers selected a specific topic for the action research project along with a measurable goal. Their experience from this project was mainly by trial-and-error methods, experimenting with strategies to address the topic, correcting issues for which a solution was discovered via teacher research and collaboration with peers, and beginning the cycle once again to refine their practice. Finally, the teachers reflected on the overall experience and determined lessons learned for future practice. At the end of the induction process, the teachers were deemed to have engaged in his or her unique encounter with authentic, experiential professional learning.

**Sampling.** While Yin (2014) purports that using the term *sampling* is redundant to case study design because it “risks misleading others into thinking that the case comes from some larger universe or statistical generalization” (p.44), purposeful sampling has been used and mentioned in case study research in much of the literature (Merriam, 1998). Drawing on Chein’s (1981) and Patton’s (1990) definition of *purposive* and *purposeful*, respectively, Merriam (1998) claims that “Purposeful sampling is based on the assumption that the investigator wants to discover, understand and gain insight, and therefore, must select a sample from which most can
be learned” (p. 61). Working from this definition, and Merriam’s (1998) directive that criteria must be established, criterion-based, purposeful sampling was used to select the participants for the study.

Only teachers who had participated in the district’s induction program and successfully exited it within the last three years were invited to contribute to the data collection. With permission from the district’s superintendent and Northeastern University Institutional Review Board approval (Appendix A), email addresses for all former inductees who exited the program between the years 2013 to 2015 were identified and an invitational email (Appendix B) sent to the teachers on the list, explaining the study and requesting that, if interested, they should sign up on a Google form. An active link to the form was included in the email. The email was sent using the undisclosed recipients’ feature, which prevented recipients from viewing the names of others. Ten emails bounced back to the sender as a result of cancelled email accounts. The teachers whose emails bounced had either been terminated or resigned on their own; thus indicating they were no longer employed by the school district.

The research was designed such that the first 10 individuals to agree to the terms of the study would become participants. A wide sampling net was cast to allow for non-response to the invitation and potential attrition during the study. The researcher’s goal was to acquire a minimum of six to eight, and maximum of 10, from the number of participants that were invited. Over the course of six days, 10 teachers responded to the survey and indicated their interest. The teachers were contacted to acknowledge receipt of their interest in the study by the order in which they responded, until a maximum of 10 was reached. As soon as 10 participants had completed the interest form, it was closed, and the following message posted: “Thank you for your interest in the Beginning Teacher Research Study. The interest form is no longer accepting
responses as the researcher has received the maximum number of interested participants desired for the study.” The sample of 10 teachers amounted to a cross-section of content areas that included: world languages, English language arts, math, science, and special education.

Table 2

**Beginning Teacher Participants’ Profiles**

<table>
<thead>
<tr>
<th>Name *</th>
<th>Years of Teaching</th>
<th>Subject Area</th>
<th>Route to Teaching</th>
<th>Highest Degree Attained</th>
<th>Exited Induction</th>
<th>Previous Career</th>
<th>Self-Identified Ethnicity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ashton</td>
<td>6</td>
<td>English</td>
<td>Intern</td>
<td>MBA</td>
<td>2013</td>
<td>Advertising Executive</td>
<td>Caucasian</td>
</tr>
<tr>
<td>Carmen</td>
<td>4</td>
<td>Science</td>
<td>Student Teacher</td>
<td>Ph.D.</td>
<td>2014</td>
<td>University Researcher</td>
<td>Caucasian</td>
</tr>
<tr>
<td>Charles</td>
<td>4</td>
<td>Mandarin</td>
<td>Student Teacher</td>
<td>BA+</td>
<td>2014</td>
<td>None</td>
<td>Asian</td>
</tr>
<tr>
<td>Emily</td>
<td>3</td>
<td>Special Education</td>
<td>Intern</td>
<td>BA+</td>
<td>2015</td>
<td>Healthcare Technician</td>
<td>Black</td>
</tr>
<tr>
<td>Fred</td>
<td>9</td>
<td>Special Education</td>
<td>Emergency/ Intern</td>
<td>BA+</td>
<td>2014</td>
<td>Custodian/campus supervisor</td>
<td>African American</td>
</tr>
<tr>
<td>Lucy</td>
<td>3</td>
<td>English</td>
<td>Student Teacher</td>
<td>BA+</td>
<td>2015</td>
<td>Law Enforcement Officer</td>
<td>Caucasian</td>
</tr>
<tr>
<td>Nancy</td>
<td>4</td>
<td>Science</td>
<td>Student Teacher</td>
<td>BA+</td>
<td>2013</td>
<td>None</td>
<td>Latina</td>
</tr>
<tr>
<td>Tim</td>
<td>4</td>
<td>English</td>
<td>Student Teacher</td>
<td>MA</td>
<td>2015</td>
<td>None</td>
<td>Caucasian</td>
</tr>
<tr>
<td>Valerie</td>
<td>9</td>
<td>Spanish</td>
<td>Emergency/ Intern</td>
<td>BA+</td>
<td>2014</td>
<td>None</td>
<td>Latina</td>
</tr>
<tr>
<td>Winston</td>
<td>6</td>
<td>Math</td>
<td>Intern</td>
<td>MA</td>
<td>2014</td>
<td>Tutor</td>
<td>Caucasian</td>
</tr>
</tbody>
</table>

*(Pseudonym)*

**Limitations of sample.** As with most qualitative research, non-probability sampling, a characteristic feature of purposive sampling, is not designed to offer generalizability (Merriam, 1998; Creswell, 2007). The case was limited to a small group of participants who brought their knowledge and experience as one set of insights from a single district to the research problem. As such, the views and perspectives of the participants, while relevant to the education community at large, cannot necessarily be applied to universal settings.
Researcher’s Place in Recruitment and Access

Researcher’s relationship with participants. The researcher, having been the induction coordinator for the school district’s induction program during the participants’ induction period, had an existing relationship with them. Her job duties included the responsibility to pair each beginning teacher with his or her mentor, facilitate their professional development, assess the measurability of their action research goals, and conduct the exit interview for clear credential recommendation. Hence, the participants were well-versed in the professional style of the researcher and knowledgeable about her expectations within the scope of teacher development. As such, the researcher was deemed a participant observer, who came to the study with a plethora of background knowledge about each participant, increasing a comfort level greater than normal that had been established prior to the interview (Rubin & Rubin, 2012).

The major difference in the relationship between the participants and the researcher during induction and during the research study was that the researcher no longer had any administrative jurisdiction over them as far as supervision was concerned. In other words, the researcher was not an administrator assigned to evaluate their current practice for the purpose of job performance. Therefore, the participants were encouraged to freely state their experiences as they had occurred without fear of repercussions, since the researcher had no influence or authority to revoke their clear credentials based on any new information acquired during the research.

Recruitment. The researcher recruited participants under the marketing umbrella of revitalizing professional learning through the lens of beginning teacher experiences. The project was sold by offering them the opportunity to provide feedback on their learning experiences during the inquiry projects and report on the impact these experiences had on instructional
practice during Common Core implementation. The pioneering role of being the first group of teachers to experience induction and the curricular shift of Common Core standards put them in a unique position that previous generations of teachers did not have. As such, the researcher formally recruited participants via an invitational letter (see Appendix B) sent through district email. Recipients of the email were undisclosed, maintaining the privacy of those who had been approached. The appeal focused heavily on the value of their contribution to the education community. Since the researcher had already established a working relationship with potential recruits, the expectation was that the goodwill already established would serve as an incentive for their participation. Nevertheless, given the time-consuming nature of one-on-one interviews, classroom observations and examination of personal documentation and artifacts, a $15 Amazon gift card was offered as material compensation for time and effort expended. All participants completed the study and received the gift card, which was issued after the second interview.

Access. Upon formal approval from the superintendent (Appendix C), the researcher contacted potential participants via district email, and later, after they signed the consent form, email or telephone was the medium of contact. With regard to documentation, beginning teachers maintain a portfolio of their formative assessment modules that were readily shared with the researcher in both hard copy and online formats. As far as obtaining information from classroom observations, no major issues occurred. The participants gave the researcher access to their mentor-recorded, classroom observations that were stored in their portfolios. Classroom observation data were documented on state approved observational tools used by mentors (Appendix D).
Participants’ Protection

The researcher adhered to protocols established by Northeastern University’s Institutional Review Board (IRB) to protect the anonymity of the study’s participants. Permission from the superintendent of the school district was requested and submitted along with other relevant documentation to obtain approval by the IRB. Electronic communication with the participants was conducted via their personal email, except in three instances, where the participants opted to use their district email. No participant was interviewed until a full understanding of the study was acknowledged and agreed upon, and the consent form (Appendix E) had been signed.

Once the interested group of participating teachers agreed to participate in the study, they were given opportunities to ask questions prior to the interview. Upon their final consent, an interview was arranged at a location of their choosing, away from school sites or other district property, unless they expressed a preference for their school or district location. Participants were reassured that they could discontinue the study at any time, with no repercussions meted out to them. All information that was collected was securely stored and not shared with any third parties.

Data Collection

As mentioned earlier, the researcher was a participant-observer in this study. Having established relationships with the potential participants, she selected, through purposeful sampling, former beginning teachers. The teachers were contacted by a recruitment letter via email and potential participants were invited to respond, using a secure Google form. Once participants agreed to the terms of the study and signed the consent form, data collection began. This data collection process consisted of three phases, inclusive of interviews, examination of documents and artifacts, and mentor-recorded observations.
**Initial interview.** Phase one included one-hour, face-to-face interviews as the primary source of data in the collection. The researcher interviewed each participant separately to allow for privacy and non-influence by other participants. Interviews were held in private, mutually agreeable locations, away from the participant’s school site or district buildings, unless the participant requested to be interviewed at the school site. Questions were semi-structured, allowing the participant to respond in the manner most comfortable to him or her (protocol can be viewed in Appendix G).

**Documents and artifacts.** In phase 2, the researcher delved into the participants’ induction inquiry plans and reflective notes to corroborate information that had been reported during the interviews. These documents were reviewed to identify factors that contributed to experiential learning. As well, their Common Core lesson plans that were used during inquiry projects were reviewed within their electronic or hard copy portfolios to make sense of connections during the Common Core implementation change in the school district. Request for these documents and artifacts that supported them was incorporated in the participants’ signed consent form.

**Mentor-recorded observations.** Finally, in phase 3, the researcher reviewed documentation from mentor-recorded classroom observations that were conducted by the participants’ mentors. These documents provided a snapshot of how the participating teachers implemented their professional learning experiences as was expressed in the interviews. Both teacher and student activities were noted as the researcher strived to make sense of the data gathered from phases 1 and 2 and their relationship and impact on instructional practice (Miles, Huberman & Saldana, 2014).
Once the researcher completed review of all data sources, the coding process began. In the event that questions or further clarification continued to linger, the researcher made notes and addressed them with participants during the second interview.

**Member checking.** At the culmination of the third phase, a second interview was held for member checking and clarification of data, using follow-up questions. Participants received a summary of their data and/or their transcripts for review and verified that the data were reported as they had intended or offered minimal corrections by refining how expressions had been worded. A request to hold the second interview was incorporated in the participants’ signed consent form.

**Figure 4.** Phases of data collection in the inquiry

**Data Storage**

To maintain confidentiality of participants’ information, several precautionary steps were taken to ensure data security (Creswell, 2007). Privacy began as early as the recruitment phase. When candidates were invited to participate, names of potential participants were not revealed in the recruitment email. Instead, the email consisted of undisclosed recipients. Along with the
invitational email, an online form, created in a secure Google account, was used as the informational tool by which the potential participants sign-up to give initial consent to the study. A request was made for their private email addresses so that future emails would be kept off the school district’s server as further communication ensued. Data were not shared among participants, meaning that a single participant had no knowledge about the other participants’ one-on-one contribution unless they elected to share that information outside of the study’s parameters.

Interviews were conducted at a mutually agreeable location, away from the participants’ school sites or district buildings, except for two instances where the participants requested to be interviewed at the school site. A digital recorder was used to capture voice data and the researcher took notes simultaneously. Both digital tapes and notes were stored in a locked drawer at the researcher’s home office, where no one else had access.

Digitally recorded notes were uploaded to the researcher’s personal computer for which only she had the access password. Shortly after the interviews were recorded, the researcher submitted the files for transcription to Rev.com with which she established privacy and confidentiality. Upon receipt of transcribed digital files, they were kept in a secured folder on the researcher’s personal computer, accessible by her only. Printed copies were stored in a locked file drawer in the researcher’s home office.

During review of documents owned by the participants, the researcher ensured that printed copies were stored in a locked file drawer so that they were never exposed to others’ viewing. Documentation that was shared online was viewed online and not made accessible or shared with others. Similarly, notes from classroom observations, lesson plans, reflective materials, and artifacts were locked away from other individuals.
Data Analysis

The qualitative nature of the research study called for careful and iterative analysis of the data to identify codes and themes that emerged from the voices of participants (Creswell, 2007). As interviews, documentation, and observational notes were gathered, the researcher began the process of memoing to gain a thorough understanding of the data and its application to the research questions. Burks, Chapman and Francis (2008) posit that “Through the use of memos, the researcher is able to immerse themselves in the data, explore the meanings that this data holds, maintain continuity and sustain momentum in the conduct of research” (p. 69). This process proved useful as a first impression of the data.

Coding. At least two cycles of coding were employed to examine the data. The process began with inductive methods followed by deductive methods. Saldana (2013) proposes several types of preliminary coding methods to ferret out the substance of the raw material gathered from interviews, documents, and artifacts. Among them are initial coding and in vivo coding that were used in the first cycle of the analysis. Drawing on Strauss and Corbin (1998), Saldana defines initial coding as “breaking down qualitative data into discrete parts, closely examining them, and comparing them for similarities and differences” (Saldana, 2013, p. 100). In vivo coding “refers to a word or short phrase from the actual language found in the qualitative data record” (Saldana, 2013, p. 91). These coding actions were taken to preliminarily analyze the data.

Beyond the preliminary coding phases—focused coding—a type of deductive coding, was employed during the second cycle of the analysis. Focused coding served as the sequel to in vivo as well as initial coding, and aimed to “develop categories without distracted attention at
this time to their properties and dimensions” (Saldana, 2013, p. 213). Through the development
of the categories from focused coding, primary themes emerged from the data.

**First cycle coding.** During the first phase of coding, transcripts were examined to closely
identify participants’ words that were repetitive, emphatic and reflective. Saldana (2013)
admonishes researchers to “attune yourself to words and phrases that seem to call for bolding,
underlining, italicizing, highlighting” (Saldana, 2013, p. 93). As such the participants’ transcripts
were closely examined and scrutinized for emphatic words and phrases. Saldana (2013) further
advises that the emergence of these phrases should be attributed to the presence of “impacting
nouns, action-oriented words, evocative word choices, clever or ironic phrases, similes and
metaphors” (p.93). The researcher closely adhered to these instructions.

Hence, based on initial and in vivo coding methodologies, the researcher used
participants’ words or expressions to display preliminary codes from the data. The researcher
then incorporated additional codes from the remaining data sources, namely, documentation,
artifacts and field notes from classroom observations as an extension of the analysis. Once the
analysis was complete, a summary for each teacher participant was composed.

*Figure 5. Inductive coding cycle*

During the next step, the researcher transitioned to second cycle coding by further re-
examining the data collected during the first cycle. Saldana (2013) offers several types of
transitions and their benefits, one being the construction of categories from the classification of codes, with the intent to reassemble, re-organize and transform the data for a better focus. With this category-construction method in mind, summaries were utilized to synthesize the data. To check for convergence and divergence between the participants’ data, the researcher highlighted areas of commonality, and differences within the summaries.

<table>
<thead>
<tr>
<th>Participant #1 Response (underline emergent key words)</th>
<th>Participant #2 Response (underline emergent key words)</th>
<th>Additional Participants’ Responses (1 per column) (underline emergent key words)</th>
<th>Commonalities across Columns</th>
<th>Categories (Based on codes that emerged from each column, if applicable)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Data summary</td>
<td>Data summary</td>
<td>Data summary</td>
<td>Statement to indicate convergence or divergence</td>
<td>Category #1 (if applicable)</td>
</tr>
</tbody>
</table>

*Figure 6. Data organization for transition to second cycle coding*

**Second cycle coding.** With the inductive process completed, the researcher proceeded to the deductive method of *focused coding*. Saldana (2013) purports that “The primary goal during Second Cycle coding is to develop a sense of categorical, thematic, conceptual, and/or theoretical organization from your array of First Cycle Codes” (p. 207). Since focused coding highlights “the development of major categories or themes from the data” (Saldana, 2013, p.213), the researcher charted clusters of categories that emerged as primary themes and sub themes. Themes that persisted within the categories maintained their in vivo labels and guided the placement of supporting data items that served as sub themes. The process of deductive analysis in which both primary and sub themes developed is displayed in Figure 7. A total of ten primary themes from in vivo coding emerged, which are described in detail in chapter 4.
A scholarly debate exists as to whether or not validity, reliability, and thereby, trustworthiness should be measured in qualitative research (Creswell, 2007; Merriam, 1998). The researcher was cognizant of this paradox and used a number of validation strategies that contributed to the trustworthiness of the inquiry. A description of each strategy and its application to the study follows.

The first step taken to attain validity was member-checking. According to Creswell (2007), “This approach…involves taking data, analyses, interpretations, and conclusions back to the participants so that they can judge the accuracy and credibility of the account” (p. 208). The researcher carefully adhered to this protocol. Beyond the third phase of the study, the researcher conducted a follow-up interview with the participants to ensure that the transcription and its interpretation thereof fully relayed the intended message. All attempts were made to clarify potential ambiguities or incomplete comprehension of the materials. Creswell (2007) posits that “a distinct strength of qualitative research [is] … the detailed thick description and the closeness of researcher to participants in the study” (p. 207). Every effort was made to ensure that both researcher and participants were satisfied with the accuracy of the data review.
The second validation strategy used was corroboration. Given that the researcher used several types of data sources, she engaged in a thorough examination of participants’ documentation to corroborate interview data with evidence from a variety of materials. Hence, as Merriam (1998) contends, “multiple sources of data, or multiple methods [were used] to support the findings” (p.204). Consequently, the researcher meticulously examined the primary themes and identified data that aligned with each one (Saldana, 2013).

Perhaps the most powerful of all the validation strategies used was the researcher’s reflexivity. At the outset of the study, the researcher delineated her positionality and potential biases that could impact the study. As such, the researcher frequently assessed internal validity of the study by questioning and clarifying interpretations of reality (Merriam, 1998). The researcher was aware that the fluid nature of dialogue enables potential for misdirected questions, responses and embellishments by both parties within the research conversations. Rubin and Rubin (2012) caution that “Although the researchers initially set the overall direction, the conversational partners influence the focus of the interview by suggesting different lines of inquiry and by responding to—and at times modifying—the researcher’s ideas” (p.72). They contend that this relationship is influenced by “personality, expectations, and background characteristics of both researchers and interviewees” (p.72). As a result of this caveat, the researcher exercised restraint in this endeavor and was watchful for extreme behaviors that could have thwarted the focus of the study (Miles, Huberman, & Saldana, 2014).

Despite the strengths that the researcher brought to the study by virtue of being a participant observer, there were limitations that surfaced. Participants may not have felt comfortable providing significant details about the administrator’s role in the program, since she was also the researcher. Those who offered any input only provided positive remarks. Another
drawback originated from the second-hand distance at which the researcher analyzed the participants’ classroom observations. Observation notes were documented by the participants’ mentors through their lens; then, later analyzed by the researcher. These snapshot episodes of classroom practice and analysis may be shortsighted. Further, the researcher opted to close recruitment after ten individuals had responded; this may have imposed limitations on the subject areas represented and potential participants who could have contributed additional insights to the induction experience.
Chapter IV: Findings and Analyses

The purpose of this single-case, qualitative study (Creswell, 2013) was to explore the impact of a beginning teacher induction program during Common Core implementation in a California, suburban high school district. By engaging in a qualitative investigation of a target group of California beginning teachers’ reflective experiences through inquiry-based, job-embedded professional learning activities, the education community may identify factors that generate success as these teachers advance deeper into professional practice, while adapting to shifting paradigms. Equally beneficial might be a discovery of the obstacles and inhibitors that could be addressed to enhance administrative support of beginning teachers. Moreover, findings may be established from which policymakers can glean in making their decisions to sustain effective professional learning programs and resources.

The literature and my own positionality and experiences as an administrator led me to the following overarching research question: What is the induction experience for beginning teachers during the implementation of Common Core Standards in a California suburban high school district? Sub-questions also guided my inquiry: What are the beginning teachers’ perceptions of job-embedded, professional learning? How are the needs of beginning teachers as experiential learners met (or not met) in the induction program?

This chapter begins with findings and analysis from ten emergent themes. These themes originated from two sets of interviews in which ten teachers, former members of the induction program under study, participated.

Emergent Themes

Emergent themes that addressed the research questions developed via the process of in vivo coding (Saldana, 2013) and are expressive of specific interactions between the participants,
their peers and administrators, systemic professional development systems, and practices as experiential learners. The themes are organized chronologically, indicating the participants’ developmental and experiential learning as well as their needs throughout the induction process: (1) Transition from Pre-Service to Induction, (2) Context for Teaching and Learning, (3) Collaboration with Peers, (4) Subtle Shift from Content Standards to Common Core Standards, (5) Questioning and Ascertaining the Merits of Inquiry as Professional Development, (6) Learning by Experimentation and from Life Experiences, (7) Current Practice is the Ultimate Payoff, (8) Nurturing Experiential Learning, (9) Obstacles to Induction, and (10) Managing the 21st Century Classroom.

**Theme 1: Transition from Pre-Service to Induction**

Beginning teachers experience a challenging transition from pre-service to professional practice (Ingersoll, 2012; Darling-Hammond, 2010; Feiman-Nemser, 2001). These challenges mostly occur in the areas of classroom management, adjustment to school site, minimal administrative support and curriculum delivery (Feiman-Nemser, 2012). Participants in the study entered the profession with various levels of fieldwork experience which impacted their preparation for the in-service phase. Experiences differed according to the stage in which the participant had entered the profession: student teaching, internship, emergency permits.

**Student teaching.** Participants who had been through the traditional route of student teaching appeared to have a firm grounding in pedagogy, when compared with other participants who entered with only theoretical knowledge. Five out of ten participants had been student teachers and offered great praise for that experience as foundational to induction. While Nancy was the only participant who had completed student teaching in the district, all participants
reported that the experiences with their master or cooperating teacher easily transferred to their instructional setting. According to Tim,

I learned more from student teaching in a month than I did in all of my years at college in terms of how to teach. There is obviously quite a bit of other stuff I learned in college in terms of my content area but in terms of my teaching classes, specifically, there was so much practical knowledge I learned in that time. I really am a fan of practical hands-on knowledge, and I really, really loved the student teaching process.

The underlying message from Tim and other participants about their student teaching experiences was that the opportunity to observe an experienced teacher in the workplace enlightened their perspectives on what it meant to teach. They learned about the importance of having an engaging lesson and established routines and procedures as precursors to strong classroom management. Many of the principles they saw and observed were also implemented in their own classrooms.

The induction transition, for these former student teachers, mirrored elements of the student teaching process, such as knowing what items to look for during the classroom observation period and having an open mind for critique about their own work. At least one participant felt that induction had “busy work” that could have been eliminated, since he had been through student teaching. Others reported feeling overwhelmed, initially, but later discovered that every task had its purpose; yet it was difficult to recognize the value of each task in the first year of induction. Reportedly, the induction process made better sense during the second year.

**Internship.** Due to a teacher shortage in California, the Commission on Teacher Credentialing has approved temporary licensure for individuals who have established subject
matters competency to teach while they participate in a teacher preparation program. These teachers are categorized as interns and typically have a coach as a mentor to support them. During the period that four of the ten participants were interns, the regulations on the mentor requirement were discretionary, leaving mentors to perform this duty with minimal oversight. As a result, the quality of mentoring that interns received was inconsistent, and participants reported that their needs were not always met.

Winston strongly expressed his feelings as being “thrown to the wolves.” Besides having prior experience as a college tutor, he had no formal preparation in working with children. Thus, he lacked the training to manage student behavior and deliver the curriculum simultaneously. To further complicate matters, he completed his internship in the middle of the school year, which was past the cutoff point for enrollment in the induction program. Hence, Winston found himself in a gap phase, having lost his mentor due to the internship completion and no support provider assigned due to his inability to enroll in induction. These factors proved abysmal to his support and development until he earned his preliminary credential and could begin the induction process. Consequently, his transitional needs were not met.

Emily, by contrast, who had completed her internship in an accelerated manner, earned her preliminary credential just in time to enroll in induction. Fortunately for her, she was able to continue with the same intern coach as her induction mentor, and found consistency of the relationship valuable to meet her teacher development needs. Ashton shared a similar experience to Emily. He worked as an intern while earning his preliminary credential and felt supported by his coach, enabling him with a smooth transition to induction. He expressed that he felt supported during the transition period.
Emergency permit. Prior to the granting of internship credentials, the California teacher shortage and availability of funds for class size reduction spurred the credentialing commission to grant emergency permits to individuals who held bachelor’s degrees and were planning on enrolling in a teacher education program. Two participants in the study had entered the education field via this route. They later became interns once they had acquired subject matter competency.

Valerie reported strong support during her first year as an emergency permit teacher in another district. During this period, she attended a series of Saturday classes with other emergency permit holders and practiced the strategies during the week in her classroom. She expressed,

I actually had a successful first year because … I was given an opportunity to attend a 40-hour workshop during ... five Saturdays. It was a toolbox of strategies and ... foreign language [methods] that focused on Total Physical Response strategies, comprehensible input, understanding exactly what that was, and how to make sure we’re using them in the classroom.

To support this successful training, as Valerie described above, she reported that her administrator routinely visited her classroom to check on her progress with strategies she had learned. She conveyed that he would clearly express his open office policy and invited her to request any needs that she had. Valerie asserted, “Knowing that, that I had that access and then, along with the workshop that I was attending, was such a great support. For me, my first year was amazing.” For Valerie, this was the ideal situation for someone who was entering the profession without prior experience. She overwhelmingly expressed that her needs were met.

Valerie’s term at her first school was short-lived, since she had to move to her current city. Unfortunately, the supportive experience she had encountered at her former school was not
replicated in the new district. All levels of personnel, from administration to classified staff, appeared distant, and she felt isolated. Eventually, she transferred to a different site within the same district. By then, she was eligible for an intern credential and was assigned a coach. The coaching she received was adequate but nothing compared to the first year experience. Many of her needs were not met.

As such, her transition to induction was “bumpy at best.” She had to struggle to learn strategies for success on her own. By the time she started induction, she felt that in many instances, she had already advanced beyond where her counterparts were, having conquered many classroom management battles.

Fred, the other emergency permit holder, felt supported throughout each phase of his transition to induction. As an emergency permit holder, he reported feeling easy acculturation to the classroom, since he had worked on the school site as a custodian and security officer. He expressed that this transitional time period gave him an opportunity to liaise with students in a more intimate, positive setting as opposed to being the “security guy, who would only interact with them when they were in trouble.” While the change of setting was different, he did not encounter classroom management problems, but felt vulnerable in the curriculum areas.

Later on, when he became an intern, he was pleased to have a coach on site to assist him as he grappled with curriculum pacing and assessments. He found the experience of teaching by day and attending university classes by night “a good balancing act” in that he was able to practice in the classroom what he had learned the night before. As such, Fred expressed that his needs were met as an intern during the transition to induction, a period in which he could build on all that he had learned in the previous stages.
Theme 1 summary. Participants’ transition experiences into the induction program varied by the status in which they entered the education field. Their experiences ranged from former emergency permit holders and interns with little to no mentoring to individuals who had been through student teaching with a master or cooperating teacher. Based on these participants’ perspectives, their entrance into induction was either tedious or a smooth transition. Those who had early learning opportunities with a veteran teacher or administrators seamlessly integrated. Those who had gaps in mentoring or field experiences expressed that they had to some catching up to do.

Theme 2: Context for Teaching and Learning

The California teacher induction system is based on formative assessment of beginning teachers’ professional learning in the context of their instructional environment. The state-sponsored document that the majority of induction programs use for executing this process is called *Formative Assessment for California Teachers* (FACT). FACT is comprised of four modules: Module A: The Context for Teaching and Learning, Module B: Assessment of Teaching and Learning, Module C: Inquiry into Teaching and Learning, and Module D: Summary of Teaching and Learning.

Module A, as shown in Figure 8, is designed with tools beginning teachers use to become acclimated with the students in their classrooms, school site, district and community environments. The purpose of the module is to assist teachers with learning how environmental factors, such as socio-economics, language, culture, and community resources impact students’ academic development (California Induction, 2014). Beginning teachers and their mentors acquire this information by using tools within the module to focus on a particular class, school, district, and community and use this information to inform instructional decisions and identify
areas for professional growth (California Induction, 2014). Hence, the teachers take a detailed look at the composition of their class population, including information about special needs, discipline records, special alerts, English learner status, and demographic information.

*Figure 8. Context for Teaching and Learning (California Induction, 2014)*

With regard to the school site of employment, the teacher makes special note of administrative documents, namely, organizational charts, faculty manuals, staff policies, student discipline policies, curriculum resources, school accountability reports, and classified staff
responsibilities. Moving outside of the school parameters, the teacher must also note district policies, in general, and be able to identify community resources, such as parks, recreational centers, and museums that can be of benefit to students.

After gathering this information, beginning teachers, along with their mentors, are able to map the best fit for their student population, such as creating seating charts with a rationale for student placement, incorporating community resources in lesson plans, differentiating instructional methods for various learning styles, developing a plan for parent communication, and cataloguing a directory of contacts to use for obtaining resources. As Nancy claimed, “I had to go find out who did this, and who did that… ask people, and meet people on campus. You don't know how schools work [when you arrive on campus].” This statement indicated the need for a comprehensive orientation of beginning teachers to the school environment.

The participants commented on a number of benefits in their work with this module that have set the foundation for current and future practice. These benefits included (1) Connecting students’ backgrounds to curriculum, (2) Supporting differentiation, (3) Learning how schools operate, (4) Parent communication, and (5) Incorporating community resources.

**Connecting students’ backgrounds to curriculum.** Participants reported that this component of Module A was appropriately timed in the induction cycle and of great relevance to their teaching and learning. For this module, participants pulled class rosters and meticulously researched the students’ profiles. The goal was to have sufficient information about the students’ backgrounds so that teachers could tailor instruction to suit their potential interests. All participants indicated that they might not have partaken in this exercise if it was not an induction requirement due its time-consuming nature. However, they acknowledged that it was a
worthwhile investment to study the profiles of each student in order to plan and adapt lessons that would support classroom engagement.

Tim posited that digging deeply into students’ backgrounds was extremely important for a first year teacher to do but “quite often other [duties] took precedence, so it was beneficial that he was required to gather this data” to appropriately serve his students. Ashton categorically named the “Context for Teaching and Learning” module as the foundation for how he organized his classroom. He explained that, “[The module] takes you through the theory of a classroom, seating charts, understanding the kids, their needs, and the different types of students, the variety, and the students with special needs.” He found the tools applicable to classroom engagement and management, and indicated that they have become routine practice throughout his tenure.

Furthermore, Carmen said,

Setting up the context for learning helped me understand the background of students and not just educationally, but developmentally, socioeconomically…what kinds of resources they had available to them outside of the classroom, so I could plan their learning experiences.

As a result of her learning from the module, stated above, Carmen conducted classroom surveys at the beginning of the year to get to know her students on a personal level and followed up with an interest survey to identify what engaged them that she could use as a hook for curriculum delivery. She continues to add to the survey annually, when she considers new items of relevance during the school year.

Supporting differentiation. Given that the module required teachers to pull English learner, special education, and at-risk students’ records to prepare for differentiated instruction, participants had the opportunity to apply the principles of universal access, wherein they would
ensure that the needs of all students were met as they planned and delivered their lessons. Emily recounted, “Module A really helped me know exactly what type of planning was involved, what would appeal to [the students], what information was necessary or the way lessons were to be presented … what I could use to appeal to them.” She asserted that if she had not been forced to be as thorough with her differentiation planning, she might have overlooked essential items that could have ended up being a mere afterthought.

In addition to the participants’ preparation for unique student needs, the induction program buttressed their efforts with professional development activities on Specifically Designed Academic Instruction in English (SDAIE) and Universal Design for Learning (UDL). Participants reported that these specialized trainings provided the knowledge and skills to differentiate the curriculum so that all students—not just English learners and special education students—had educational benefit.

Besides training opportunities, participants recalled having access to coordinators, instructional coaches, program specialists and other personnel to support logistical needs that surfaced, such as translation, equipment support and devices.

**Learning how schools operate.** A common assumption of beginning teachers is that they know how schools operate because they have attended schools themselves and may have partaken in student teaching in a teacher’s classroom (Christenson et al., 2002). While most schools have similar operation structures, schools differ internationally, nationally, statewide, and districtwide. Hence, to support efficiency, it is vital that the beginning teacher quickly learns and understands how the particular school at which she or he is employed operates.

Module A included tools, which the participants used to learn the organizational hierarchy of the school and district. The participants had several tasks that enabled them to
research the school’s historical background and standing within the community. They had access to California test data, student and teacher demographics, sources of funding and other variables that are factors in the administration and assessment of a school. Reportedly, this information provided the big picture for the participants, so they could understand the system in which they were a unit.

On the micro level, it was vital that the beginning teachers receive training in the logistical side of the school to understand how to obtain materials and satisfy ancillary support needs. For example, access to the department chair for curriculum resources; learning how to get supplies, such as copy paper, board markers, paper towels, and printer cartridges; acquiring technology tools, such as computers, smartboards, and tablets; and obtaining attendance records and grading systems were deemed crucial to their efficiency and success. It was against this backdrop that Nancy reasoned,

You go through a credential program but you don't know all the different departments …and the secretaries and EL [English learners] and who to talk to about stuff...supplies and ordering in your department, so just learning how the school works and who to talk to is something that you don't learn until you get there and BTSA [the induction program] made me learn how... I remember that chart. I use it all the time. There's that first page which asks you who is your school nurse?

Nancy’s message was shared by all of the participants who argued that curriculum and instructional training are of paramount importance to the beginning teacher’s development, but if the supporting logistical pieces are not in place, it is difficult to function effectively in the classroom.
**Parent communication.** Knowing that communicating with parents is key to building family connections, the induction program strongly emphasized the parent communication tool in Module A. Mentors were trained to prepare the beginning teachers for important conversations they would initiate with parents. It was not sufficient to have a “talk;” documenting the concrete elements of the discussion, where decisions and commitments were made, was more important.

As far as Ashton was concerned,

> It’s the importance of communicating to the outside community, the parents, keeping a log of who shows up for back-to-school night. All those things you need to get in place the first couple of weeks, how to set the tone and culture in class.

He and other participants deemed the communication piece of great relevance to teaching and learning as a demonstration to the students that their educational achievement relied on a successful partnership between student, parent and teacher.

Valerie noted, in particular, that when students were struggling with subject matter, she made it her duty to make a phone call to the parents to see what accommodations could be arranged for improved learning. She kept a telephone log with information from the conversation, so she could follow through and maintain a history of the communication events.

Most participants noted that their support providers stressed, “Document, document, document!”

**Incorporating community resources.** Another feature of Module A was the opportunity for beginning teachers to explore the community zone in which their students lived and identify public entities that could be incorporated into instruction. Teachers were required to map the school boundary lines, indicating the location of feeder schools, libraries, museums, parks, and recreational centers. In doing so, they could direct their students to free resources and field experiences that could augment the curriculum.
Fred reported that having been through the module’s process of community awareness “burned into this mind” was the need to have an intimate connection with the students. He was able to gather “exactly what's around the community.” He could answer questions, such as “Do they walk or [get a ride] to school? What kind of health issues do they have? Do they have an IEP? If so, what are the accommodations? Do they know how to use technology in the classroom? Where might they go for assistance?” Participants reported that this kind of background knowledge proved useful as they designed instructional experiences for their students. For them, delving into background knowledge meant knowing their audience and their surroundings, and using the right targets to deliver the curriculum.

**Theme 2 summary.** The Context for Teaching and Learning as a module strongly resonated in the participants’ induction experiences. The learning experience as expressed by the participants was that “teachers do not teach to a sea of faces” or in a “vacuum.” Instead, students access the curriculum with increased engagement when teachers make connections through the students’ life experiences, gleaned from having their background knowledge. This lesson illuminated the participants’ philosophy on pedagogy and spurred them to continue this practice.

As the elements of differentiation and universal access unfolded, the participants discovered that these practices not only benefitted the students for whom the differentiation was intended but the entire classroom group. Their training in SDAIE and UDL strategies amplified previously acquired theory in their credential programs and provided a job-embedded environment in which they could be practiced.

Learning the logistics of how their school site worked also proved beneficial. Knowing the “case carriers for the special education students,” “the tech guy,” “the janitors…and having a
good relationship with them” was important because as Nancy claimed, “at some point, you're going to need something from them.”

Coaching the beginning teachers to communicate with parents also proved beneficial because they quickly learned that a child’s academic success is a partnership endeavor. The participants reported that they no longer felt that the burden was all theirs. In addition, reaching out to the community and its resources also proved favorable to the participants as this was another means of support for students to tap into beyond the classroom.

**Theme 3: Collaboration with Peers**

All participants expressed that they found immense value in collaborating with their peers during induction. Given that the participants were placed in a cohort model: year ones and year twos, they had opportunities to learn from first year as well as second year induction participants. Notably, although the induction participants were undergoing their first two years of induction, their range of teaching experiences ran the gamut from former interns who had already acquired at least two years of experience to brand new preliminarily credentialed teachers who had only experienced student teaching. Nevertheless, their interaction and collaboration generated several advantages that were clearly stated during the study. These included: cathartic bonding, increased self-confidence, leadership models, content area support, and relationship and networking building.

**Cathartic bonding.** Induction participants came from their school sites on a monthly basis to attend induction meetings at a districtwide professional learning location, which provided several opportunities to share experiences with each other both formally and informally. Participants of the study reported that the bonding and sharing that occurred at these
meetings proved to be cathartic as each one could identify and empathize with the other’s beginning status without feeling judged or being judgmental. According to Tim,

I really enjoyed the relationships that came from [induction] and also knowing that some of my frustrations were shared by other teachers in terms of what it means sometimes to having a misbehaving student or to be overwhelmed with the amount of work we're grading. Just to know that you're not alone is really great. I also really liked the fact that there was a lot of provision for personalization in the induction process.

For Tim, as well as other participants, several personal and professional relationships were built at induction meetings with teachers from his school site as well other sites. They could vent about challenging days, complain about lack of resources or express their displeasure with their workload. Equally, they could brag about new technology, a wonderful mentor or a good class period. This sense of camaraderie among them spurred a warm climate that, reportedly, made induction meetings a comfortable zone for collaboration.

**Increased self-confidence.** With the opportunity to share best practices during pair-share sessions, the participants reported that their self-confidence rose significantly when they realized that each of them brought strengths to the table. Most participants reported that, initially, the induction process seemed nerve-wracking, and it was difficult for them to foresee how they could manage their class load and induction requirements at the same time. However, through peer to peer connections, they were able to relax and build their self-confidence. As Fred noted,

…the [induction] process was tedious at times, [but] the one thing that I know I could depend on with induction was that we were going to be five, six, seven, eight, nine people at the table, and I could say, ‘Hey, this is what I did, what was your experience in this situation? Do you have something similar?’
Fred as well as the other participants admitted that although they had several areas that needed development, their self-confidence as a teacher evolved from knowing they had each other’s support as a community of learners.

**Leadership models.** Participants felt that the first year beginning teachers had a significant advantage with the presence of the year two candidates in the learning community. Fred, for example, found a great role model in one of his year two colleagues when, he, Fred, was a year one. According to him,

> [Name of peer] was very inspiring. …whenever I was struggling as far as organizing and so forth, he had a lot of insight to offer. There were others who let me borrow their portfolios, so I could look through it and see what it should look like and that helped a lot.

Fred found great comfort in knowing that he had access to an induction candidate from whom he could rely on for additional support.

Like Ashton, other participants demonstrated peculiar skills for which they were recognized at their school sites. Tim was known for his technology expertise to the extent that his principal provided him with extra computers and tools that could be integrated in his classroom instruction. He served as a role model to both his beginning teacher peers and those who were far more experienced. Charles was strong in using manipulatives and Thinking Maps in his foreign language classroom, which served as quite a display to his peers and administration. For every area of weakness that each of the participants felt in his or her own practice, each contended that they could see the brilliance in other beginning teachers around them, to which they could aspire.
**Content area support.** Beyond the typical classroom management issues that most beginning teachers face, many often feel insecure about curriculum delivery within their content areas (Clayton, 2007). Participants in the study expressed that the induction program afforded multiple opportunities for collaboration within content areas so that they should share lessons, report on their effectiveness, and offer suggestions for improvement.

During the inquiry module, Lucy, a second career teacher, joined the integrated curriculum team that was working on creating units for the Common Core. She characterized the experience as being “extremely helpful and [that] it satisfied... the [inquiry] requirement.” Having the opportunity to create lesson plans within her content area that had integrated components in other subjects proved powerful, since she could rely on her teacher peers to offer suggestions and provide feedback on her ideas.

**Relationship and networking building.** All participants in the study placed great emphasis on the relationship and network building opportunities that ensued from their participation in induction. This was important to them because whenever they could not have access to their mentors or administrators, they had a peer to “lend a listening ear.” Emily, for example, expressed the value of her peer conversations:

> [At our] induction meetings once a month, we always had time where we could talk about what we're actually doing. We should share different strategies, information about what worked. Then I could take that back and of course, I would try to modify it according to my students and their level. That really helped me develop as a teacher and to this day, I have maintained strong relationships with my peers.
For Emily and others, these relationships meant that they had a path out of isolation. They could rely on the informal buddy system of reaching out to a peer beginning teacher when circumstances were challenging.

Several participants recalled these networking experiences as a valuable component that required greater emphasis in the induction program. Tim, Fred, Nancy and Valerie expressed that they made it routine practice to reach out to new cohorts of beginning teachers when they met them on their school campuses. Valerie recommended that a panel of induction alumni should present their experiences at the induction orientation meeting. She argued that based on her previous experiences, beginning teachers are generally reluctant to ask questions because they fear being classified as “not smart enough for the job.” The participants claimed that if former beginning teachers can affirm to a new group that it is normal to feel such insecurities and move beyond them, the teachers can have a smoother transition into professional practice. The participants posited that there was great potential for more extensive levels of relationship and network building with past, current, and future groups of induction participants.

Collaboration with peers emerged as a powerful focal point among the beginning teacher participants. They recounted invaluable experiences that served as an impetus for their progress in the induction program. “Having a shoulder to cry on” or “a joy to express” amounted to cathartic bonding and a comfort zone for the participants to thrive. This provided an environment to build self-confidence and emulate leadership abilities that were demonstrated in many of their members. Besides the emotional benefits of collaboration, the participants reveled in the opportunities to tap into the knowledge of others with whom they shared the same content areas. Moreover, wherever possible, cross-curricular lesson plans could be pursued. All of these collaborative factors led to strong relationship building and networking. Participants in the study
have placed considerable value on the relationships that were built during induction and the networking advantages that they still benefit from in their current practice.

**Theme 4: Subtle Shift from Content Standards to Common Core Standards**

The participants of the study entered the education field on the brink of, or shortly after, a paradigm shift from state content standards to national Common Core Standards adopted by California. As such, they began their induction term during a period of change, where they would find elements of apathy, resistance, or moderate competence with the standards among their colleagues—both veteran and beginning teachers.

All participants reported that the shift was subtle on two fronts: lack of clarity and limited governance. Seven out of ten participants felt strongly about the lack of clarity in its administrative implementation, and the remaining three perceived that since they felt independently prepared, they “jumped right in without having to rely on others.” Overall, the subtlety can be attributed to the following factors based on the participants’ perspectives: (1) Standards were not clearly defined by district or induction program, (2) Mentors were attempting to fathom the standards, (3) Veteran teachers were observed reverting to content standards as they awaited wider use of Common Core Standards (4) Preparation in content area disciplines seemed sufficient, and (5) Involvement in district programs and initiatives impacted the situation.

**Standards were not clearly defined by district or induction program.** The majority of participants perceived that directives for Common Core implementation in the classrooms were vague or undefined. Participants recalled receiving training in the elements of Common Core instructional strategies, such as academic vocabulary, reading complex text, reasoning, and sense making in content areas, but as far as having a sequential plan on how they were to incorporate these strategies in their instruction, some participants reported that guidance was lacking.
Further, participants explained that among the faculty on their school sites, many teachers continued to view Common Core as an event that was “coming.”

According to Nancy, her impression was, “We were slowly just going to start involving it [standards]. We'll just little by little kind of get it.” Given that she felt new to all aspects of her instructional environment, she did not place too much attention on adhering to the standards: “I really didn't care. I was like, okay. I don't know. I'm doing a bunch of stuff anyways. Just give it to me.” She felt apathetic to the transition because no one was holding her accountable and given that she was a science teacher, her goal was to teach the content to students, not necessarily adhere to the Common Core style of literacy and cross-curricular integration. She recalled, however, that the district offered an end-of-year training as a kick-off to Common Core and the focus areas were rigor and relevance. As such, she strived to maintain critical thinking in her lesson plans.

Ashton also shared the perspective that professional development and directions about Common Core was a slow progression. He asserted that preparation for the Common Core at his school site focused heavily on the philosophy of the change, instead of its implementation. He claimed faculty members were told:

‘Okay, you guys we're going to have a shift. It's coming. We have to start getting ready for it.’ It was really about the philosophy, the big ideas of it, not really the nuts and bolts. The philosophy came first. The nuts and bolts came later. We're still waiting on a couple more nuts and bolts right now.

As a result of the situation described above, Ashton continued to rely on elements of the content state standards with which he felt comfortable as he made the slow transition to Common Core.
Participants who did not teach in the core areas of math, social studies, English language arts, and science perceived that Common Core had little or no relevance to their instruction. It was unclear that the standards required addressing literacy in all content areas. Valerie, for example, claimed, “I haven't felt a huge impact because I [don’t teach] core subjects like math or science or history that are having to now teach literacy.” At the time, she perceived that Common Core training was offered to core subject teachers, leaving foreign language and other elective area teachers behind. Valerie considered this a disservice to the teachers in this group, since they now have to catch up to other teachers who had a greater awareness at first.

Within the induction program, a few participants reported that primary emphasis was placed on the California Standards for the Teaching Profession, rather than the Common Core standards. Consequently, training that was offered on instructional strategies for Common Core standards felt like a typical stand-alone training. Although value was found in learning the strategy, the overall picture of how the strategy fitted in the contexts of their classrooms was lacking. Charles stated that as a new teacher, he was “confused by the whole thing.” He received some training on his site, but did not feel it was sufficient. Other participants felt that the Common Core standards were embedded in the California Standards for the Teaching Profession and did not see the need for additional contextualization.

**Mentors’ attempt to fathom standards.** As participants recalled their experiences with Common Core, they reasoned that expertise in general was lacking among the seasoned faculty. Given its newness, the mentors who had been assigned to them also struggled with what instruction should look like in a Common Core classroom. Emily recalled having to figure out how to address the Common Core in her special education classroom because her mentor needed more training to guide her. She claimed,
It was … difficult because [the mentors] were also new to the process. We worked together. In other words, when I made a suggestion, we would think it through and then we figured, yes, that makes sense with this particular Common Core standard.

While Emily acknowledged her mentor’s inexperience with Common Core, she attributed her limited learning of the standards to him, since she perceived there was no one else to whom she had ready access.

A review of the mentors’ classroom observation reports indicated little or no commentary on Common Core standards. While the participating teachers clearly outlined the specific Common Core standards that applied to the lessons, the mentors did not follow-up with specific feedback on their implementation. Instead, support providers recorded vague phrases that did not necessarily align with the standards that were documented in the lesson plan, such as “group is working together to solve problems,” “[teacher] checks for understanding and is pleased with the group’s progress,” “student is engaged in small group reading,” and “teacher asks students questions regularly about their interests.” It was clear from these reports that the mentors were not seeking to identify and comment on areas that would offer specific feedback for clarifying the beginning teachers’ understanding and implementation of Common Core.

The mentors’ lack of specificity to participating teachers corroborated with the teachers’ perception that the mentors were inexperienced and did not exhibit strong knowledge in their own implementation of the standards. A number of participants in the study felt convinced that mentors were still fathoming the standards.

**Observations of veteran teachers’ reverting to content standards.** A number of participants noted that there was little or no accountability for addressing the standards, since they heard or observed that many veteran teachers continued to teach to the old content
standards. Further, a few participants noted that administrators who observed their classrooms did not reprimand them for “not teaching according to Common Core,” so they felt that, by default, they must have been doing so. As Emily conjectured,

No one was particularly confident with Common Core at that time, because it was relatively new. A lot of experienced teachers were very indecisive on how to approach certain subject matters. There was a lot of reliance on California content standards at that time.

In essence, Emily and other participants did not experience a strong push for change and gave the standards little priority in the overall scheme of other induction requirements.

Ashton appeared torn about converting wholeheartedly to the Common Core Standards because he found strengths in teaching to the former content standards. He appreciated and validated the importance of direct teaching and vowed not to rely solely on the project-based and performance-based models that the Common Core promotes. He reported that, similar to many veteran teachers, he only implemented project-based type activities 20-30% of the time in his classroom.

**Preparation in a couple of content area disciplines seemed sufficient.** While eight participants felt they had much to learn with Common Core standards, two of them felt confident that they had already received sufficient training in their undergraduate content areas. Consequently, they did not need to rely on their administrators, mentors, or the induction program to incorporate the standards in their instruction. These participants barely noticed that there was little emphasis on Common Core implementation. They felt that these standards outlined the practical way to teach, and they were already adhering to them.
Carmen’s perception of her experience with the Common Core standards was that of a seamless transition. Her pedagogical practice, as she positioned it, was already aligned with the delivery modes of project-based learning, performance assessments, analysis of complex text and a move away from rote memorization of facts. She attributed this style to her background and training as a researcher in the science field who understood that students have to move beyond the text to concrete experiences if they are to learn about realistic settings. She cautioned, however, that a strong knowledge foundation has to be laid in order for students to master the skills that the Common Core standards require, and some direct teaching is necessary to augment student-centered learning.

Tim felt that his college education greatly prepared him for its implementation. He did not consider Common Core a form of transition because being an English teacher enabled him with the training that was being emphasized under the new paradigm, such as communication, technology, literacy, project-based learning, and strong critical thinking skills. He aptly described his experience with the shift as follows:

I know for some people there’s a pre-Common Core and a post-Common Core. For me, especially in the English classroom, an emphasis on writing, an emphasis on reading, those are things that have always been a part of the English classroom. An emphasis on non-fiction text is something that is focused on a lot in college. Even in the English classroom connecting fiction to non-fiction. And then using technology quite a bit, making sure the students can use it as well. Those were things that were all part of my educational process.

Tim felt confident that his pre-service training was a natural fit for implementing the Common Core and was not disturbed by any of the forces that other participants felt were lacking to play
an active role in the classroom. Furthermore, Tim expressed strong satisfaction for his master teacher who provided satisfactory tutelage, setting the stage for transition to his own instructional practice.

**Involvement in district programs and initiatives.** Participants who were actively involved in district programs and initiatives, such as the Advancement via Individual Determination (AVID) and Integrated Curriculum Teams (ICT) found great favor in transitioning to Common Core. For these participants, Common Core standards strongly aligned with their existing practices in AVID or what they were learning in the cross-curricular teams.

Winston, for example, did not consider Common Core a major shift in his practice, since he had already been utilizing AVID strategies in his math curriculum. Due to AVID’s hallmark system of Writing, Inquiry, Collaboration, Organization, and Reading to Learn (WICOR), this national initiative is known and accepted in the education community as being strongly aligned with Common Core standards. He also acknowledged that his master’s projects were Common Core-based and the training from his graduate work enabled him to have a seamless transition.

Similarly, Fred contended that his core style of teaching had not changed. He reasoned, Some people say that AVID made that easier for me because AVID implements a lot of Common Core ideas and concepts, before there was a Common Core. I try to use a lot of AVID strategies in both my special education and general education classes... I can't say that Common Core in and of itself has made a significant transition for me while I teach. Fred did not appear to recognize the need for addressing specific and particular Common Core standards within his instructional environment. He perceived that the strategies he was using, as established by the AVID program, were sufficient to demonstrate that he was adhering to current practices.
During the preliminary years of Common Core implementation, the district formed curriculum teams, which comprised teachers of various content areas. The goal was to train teachers on how literacy could be taught in all content areas and increase informational texts into English language arts classes, rather than rely on fiction as the only form of literature. The training was delivered via a job-embedded medium in which the teachers collaborated on a unit that integrated their content areas along with the Common Core Anchor Standards of Language, Reading, Speaking and Listening, and Writing. Many beginning teachers were invited and encouraged to attend this training, and some used this project to bolster their inquiry work.

Lucy, being one of the ICT group members, recalled that the experience with a team of teachers outside of her content area forced her to do group work, which she had resisted during her academic life. Beyond the elements that were incorporated into her inquiry work, she began to implement cooperative learning in the classroom, a step she had been apprehensive to take toward Common Core implementation.

Emily, who joined the ICT in the advanced stages of induction, characterized the experience as “one that provided concrete experiences for the classroom.” Working with another special education teacher, she was able to implement cross-curricular projects with their two sets of students. In doing so, she felt that the experience enabled her to ratchet up her experience with the standards.

Theme 4 summary. As mentioned in the elements described above, participants of the study did not experience a dramatic change in the implementation of Common Core. Some expressed that they were not fully educated on the standards and how they should guide instruction, whereas others either felt they were already teaching according to the Common Core style or that administrators were not monitoring classroom instruction for Common Core.
Some participants who looked to their mentors and other veteran teachers for modeling were left unsatisfied because they, too, were either inexperienced or reverted to the content standards since there was no accountability in place for them to transition to Common Core. In a few instances, district initiatives and programs enabled participants with the requisite skills for incorporating the standards into classroom instruction. Participants who were either exposed to or had joined the integrated curriculum teams reported having concrete experiences with collaboration among cross-curricular peers and felt comfortable returning to their classrooms to practice cooperating learning with their students.

**Theme 5: Questioning and Ascertaining the Merits of Inquiry as Professional Development**

The subject of professional development sparked spirited conversations between the researcher and the participants during the interviews. At issue was whether or not job-embedded professional development, that includes inquiry-based, self-initiated practices had any merits over traditional standalone, workshop-style professional development activities. The beginning teachers experienced both models during the two-year period in the induction program. Their standalone workshops occurred via three primary settings: monthly induction meetings at a district-wide facility, at faculty meetings on their school campuses, and at district-wide trainings. The findings on their perspectives were mixed, with the majority of participants articulating a preference for the inquiry model, and a small number rejecting inquiry as a practice to be seriously considered.

**Teachers’ preference for inquiry-based professional development.** Participants who strongly advocated for inquiry as a powerful form of professional development identified specific advantages from this model that sharpened their practice. These advantages included:
the opportunity to collect and assess data within the classroom context, establishing students’ inquiry connections, flexibility for trial and error methods, and a safe space to experiment.

**Opportunity to collect and assess data within classroom context.** A teacher’s classroom context varies in multiple ways, ranging from classroom layout to student demographics and learning styles to availability of curriculum resources (California Commission on Teacher Credentialing, 2014). The beginning teacher’s ability to conduct an inquiry project within the parameters of his or her classroom environment is a unique experience, which stands out separate and apart from school site data collection, typically conducted by site and school district administrators.

Classroom research conducted by a teacher within a specific learning environment enables concentration on small populations of students at a given time. It allows periodic gathering of data on student performance that can support or contradict an anticipated measurable outcome for a teacher’s potential inquiry focus area. A teacher, for example, who has just received training in project-based learning and wants to know how project-based learning activities impact students’ assessment scores can strategically employ project-based types of activities within his or her instruction and systematically document student behavior and assessment data at specific periods during the instructional unit. Consequently, the teacher might learn if his or her sample group of students within a single classroom acquired any benefit from the implementation of project-based learning instruction and ultimately the perceived value of the teacher’s professional learning.

An example of this classroom contextual experience occurred in Carmen’s classroom. A science teacher and former university researcher, she believed the inquiry process in which she engaged during induction bolstered her ability to experiment with various teaching strategies and
data collection. She claimed, “I think the inquiry process helped me...because I got to pick little projects that I wanted to work on to help me develop lessons, unit plans to incorporate Common Core strategies into the teaching.” Her desire to maintain an inquiry-based practice propelled her to enhance low engagement lessons with authentic and concrete learning experiences for her students. She cited, for example, transforming regular notebooks to interactive notebooks in which students have a “processing side where they have to take what they learn and illustrate, make visual examples or …create … [their] own problems and solve them.” She noted this experience to explain how she used her learning from an afterschool professional development activity to test student engagement via increased interactive notebook submissions.

Upon examination of her classroom performance data, derived from tracking engagement levels as measured by the numbers of notebooks that were collected, Carmen discovered that higher numbers of notebooks were completed after she transitioned to the interactive notebook system. The ability to engage in an inquiry that required observation of student performance and documentation of data within her classroom context proved beneficial to Carmen as evidence of her development as a professional educator.

By the same token, reflecting on one of his induction inquiry projects, Ashton, an English teacher, reported in his individual induction notes:

I honestly feel that I have “seen the light” with modified/differentiated instruction. It is NOT as difficult as many teachers sometimes feel that it might be. With a little bit of creativity and “outside of the box” thinking you can really tap into some easy strategies that are both effective and a lot of fun. …[As a result of the data I gathered], I can successfully report higher levels of achievement, more on-task behavior, and less “excuses” from students as a result of these strategies.
Ashton was convinced that attempting new strategies and being creative in his implementation of them, along with the data collection, yielded positive results. In this particular inquiry project, Ashton conducted action research with his English learner students, evaluating whether or not they could perform at similar levels as their native English-speaking counterparts. Through the inquiry process, he did a pre-test to assess vocabulary development, followed by implementation of collaborative vocabulary strategies such as think-pair-share and vocabulary journals. He also placed emphasis on differentiating for various student needs. He later conducted a post-test to evaluate the impact of the strategies used. Students’ scores were ranked in three categories: Far Below Basic, Below Basic, Proficient and Advanced. A review of the results indicated that Ashton’s English learner students’ scores increased to at least one band, such as from Far Below Basic to Below Basic or from Far Below Basic to Basic from quarter 2 to quarter 4. Upon careful analysis of the data, Ashton concluded that when instruction is individualized to student needs, there are few or no limits to the extent of their academic performance. Emboldened by these results, Ashton vowed to continue experimenting and testing new strategies.

Winston, a math teacher who merged his master’s degree research topic with the inquiry project during the induction program completed two action research projects simultaneously. He reported,

[The projects] forced me to collect data and check ... I'm assuming what I'm doing is going to work, because of all the theory I've read from all these great psychologists and doctors, and you know it should work if you do this, so having to collect the data to see if it really worked, was very helpful. It did help me with my master’s because I got to look at things from a different angle.
Reportedly, Winston’s exposure to data collection within his classroom for two inquiry projects heightened his appreciation for the “mini-laboratory” in which he experimented with theory from his graduate classroom as well as the professional learning obtained during induction.

Tim, an English teacher, considered the induction program’s inquiry module “quite lengthy,” but he acknowledged that it was a great learning experience. Having recently completed his master’s thesis, he felt that the inquiry process was a quick repeat of the activities he had engaged in with his graduate work. He mentioned that the difference with the induction inquiry process was that he acquired specific job-embedded skills, such as gathering data and acting on it, within the context of his classroom environment. Based on the induction experience, he continues to collect data in his current practice, for example, conducting student surveys and storing the data in Google Docs. Reportedly, the feedback he received from his students enabled him with a steady stream of items to consider for continuous improvement.

As substantiated by the rise in student engagement levels (Carmen’s classroom), advancement of English learners’ performance bands (Ashton’s classroom), practical approach to explicating theory (Winston’s classroom) and continuous feed of data through surveys (Tim’s classroom), it is evident that inquiry-based professional development can foster data collection and assessment within the classroom context for improved teaching and learning.

**Establishing students’ inquiry connections.** Besides the high satisfaction levels experienced by the beginning teachers themselves with the inquiry process, there were reports of trickle-down effects on this practice from them to their students. Having experienced successful inquiry projects via her induction projects, Emily, a special education teacher claimed that she now models inquiry elements for her students. Research, for example, as she reported, featured
prominently in her classroom because she wanted her students to engage in critical thinking and learn life lessons. She stated,

    I want to teach them in any area of your life where you plan to start something new, you always have to do some research, whether it's going to be buying a car, when you get older and you’re buying a large ticket item, a house or even renting an apartment, whether in your personal life or in your professional life, you have to do active research.

She wanted her students to know that she, too, benefits personally from inquiry and in order to be a successful teacher constantly researches ideas for class so that they can remain engaged. Her goal was that they would develop a mindset, which actively questions, explores, and experiments with the curriculum and its relationship to the real world.

Valerie, a Spanish teacher, shared similar sentiments. She initially considered the inquiry component of the induction phase, a mere mandatory component. At the time, she did not see the benefit because it was required. Now, however, she practices inquiry seamlessly. She declared,

    You realize [inquiry] actually does work. It is beneficial. I'm always thinking “How can I make this better?” That's part of the reflection…how can I make this lesson easier for the students to understand and be able to retain it, to acquire the concept or to acquire the vocabulary… [This forces me] to go out and look for strategies. What are other teachers doing in the same content, the same level?

Valerie has demonstrated that she is an active thinker, always questioning herself for professional improvement. She stipulated that the benefit of inquiry is that “you force yourself to constantly push students to try harder.” She reasoned that, as her students observe her continuously seek new strategies for their success, they, too, might develop the inquiry connection. Both Valerie and Emily’s examples conveyed a strong message that inquiry-based
professional learning can extend to student learning and help them make connections for their own academic development.

**Flexibility for multiple levels of trial and error.** One of the inquiry-based advantages that resonated with the beginning teachers was the opportunity to try new things, learn from any resulting failures, make modifications and try them again. As Ashton noted, “teachers learn by trial and error” and new learning could occur at various time periods and levels: within a given class period, from class period to class period, from day to day, week to week or quarterly.

Nancy, a science teacher, reflected that working through the inquiry process, regardless of its outcomes, was a positive experience. She figured, “Switching up [my instructional strategies] and knowing I was trying something different [on a regular basis] made me feel [proactive].” Nancy felt that as a developing teacher, she would always have doubts, but as long as she was engaging in trial and error methods, they would lead to her professional growth and development. Proactive about upholding her professional image, she was cautious about not falling into the mold of a “lazy teacher.”

As a result of her trial and error experiences during her inquiry projects, she now feels comfortable making mistakes in the presence of her students. She has acquired the freedom to be open with them when she attempts a new strategy, knowing fully well that the lesson may not unfold as planned. This trial and error approach, as noted by Ashton and Nancy, is indicative of teacher professional learning and growth as they make meaning within each of these trial and error experiences.

**Safe space to experiment.** Beginning teachers’ vulnerabilities often lie in their perceptions of making mistakes within their practice when “outsiders,” such as parents, instructional coaches, or administrators are in their classrooms. Factors such as educational
administration policy, professional relationships, and limits to teacher efficacy often perpetuate this vulnerability (Kelchermans, 1996; Hargreaves, 2000; Bullough & Young, 2002), which can potentially inhibit developmental progress. By contrast, when beginning teachers have opportunities to take advantage of their autonomy, the classroom can be a safe space to experiment via inquiry projects for the benefit of both teachers and students.

Lucy, an English teacher, highlighted an experience in which she used her safe classroom space to conduct an experiment out of her perceived necessity. This experience occurred when she had to teach students how to write a technical document and found the textbook sample mundane and unappealing to teenagers. She agonized,

I can't even teach this because I don't understand it. I was almost in tears. I don't know how to understand this. It's too hard for me. That's when I said, “Well if it were my kids what would I do?”

Realizing that her classroom was a safe place to experiment, she tapped into her parenting background. Instead of going along with the textbook sample, she purchased metal jacks with a ball from a retail store to play the jacks’ game in class—a first game for the students. Upon reading the instructions, the students found them confusing. She later demonstrated to the students how the game actually worked and instructed them to write a business letter to the manufacturer, explaining that the instructions needed to be clarified. The letter included arguments for “why and how they [the students] could improve them.” She was gratified by the results of this risk-taking event that she had ventured to explore outside of the prescribed curriculum. This inquiry approach triggered her creativity within the confines of her safe classroom to transform what could have been a disengaging lesson to one that sparked excitement in her students.
Accepting that teachers’ emotional well-being generates a similar state with students during classroom instruction, participants of the study were equally concerned about establishing emotional security that would build a safe classroom culture. Nancy asserted that a safe culture made it practical for both teachers and students to engage in new and fresh activities. Based on her science inquiry lessons, she demonstrated to students that inquiry-based learning is such that there are no wrong or right answers. She claimed, “It is the journey and the learning that matter, along with the reflection that you do at the end.” Based on Lucy and Nancy’s experiences, it appears that inquiry professional development helps teachers feel safe in trying new pedagogy, ideas and techniques. It also helps them support their students in pursuing new endeavors.

The participants’ arguments for inquiry-based learning as job-embedded professional development appeared to bolster their own professional growth as independent learners with the ultimate quest for student achievement. The notion that one’s classroom context is a good setting for examining student performance data sets resonated strongly with the participants. Examining data that originate from classroom assessment data is a practice that has remained with all participants.

Having acquired the benefits of inquiry practices themselves, participants wanted student work to yield the same results. As such, they reported modeling and philosophizing with students about the lifelong learning and lessons that they can gain from engaging in inquiry. With no distinct rules in place to conduct experimentation, the participants felt quite comfortable with the multiple levels of flexibility with which they can operate during the course of inquiry; this situation enables modifications and constant refinement for improved practice. Against all the vulnerabilities that beginning teachers face, the inquiry method conducted within the confines of
their own classrooms provided a safe space to conduct experiments that impacted both them and their students.

**Teachers’ opposition toward inquiry-based professional development.** Despite the advantages that the majority of participants cited for inquiry-based, job-embedded professional development, a number of factors emerged as weaknesses within the model. Three out of ten participants mentioned drawbacks to inquiry-based, job-embedded professional development. Participants suggested the following: empirical proof is limited; there is no supervision or facilitation during the work; unreliability and navigation of Internet sources; and perception of low completion rates and follow-through.

**Empirical proof is limited.** Some participants did not buy-in to the notion that teachers could conduct research with results that were valid for professional learning. Although Charles found his inquiry project beneficial through the discoveries he made, he was not an advocate for job-embedded, inquiry-based professional development because he thought it lacked specific guidelines and structure. He questioned the empirical soundness of the data collected and interpretation, knowing that the teacher is biased to his or her own work:

> How would you know if it’s empirically sound? If you're doing your own PD to solve a certain problem, you don’t have oversight to guide you or to point you at the right direction. You need someone who’s more experienced to lead you in the way.

He preferred oversight from an experienced educator so that he can be pushed in the “right direction.” In the second interview, Charles compared inquiry-based learning to online learning, where, if one is not focused or disciplined with the task at hand, distractions can easily occur.

In a similar vein, Fred declared that his preference for guidance and follow-up trumped doing inquiry-based projects on his own. He questioned, “What if I invested a significant amount
of time on something that didn’t work? I don’t want that quarter or that semester to have been a waste of time for the students, and that’s probably my fear.” This question and comment showed his rationalization about the potential consequences to the educational system. He further speculated:

If I blew it, would that be fair to the kids? That’s the part that would concern me. I’m a public school teacher; people already belittle education and teaching, and they think of us as babysitters and so forth. I don’t want to give any fuel to that flame. I like the idea of having some sort of oversight.

Based on Charles and Fred’s perspectives, inquiry-based professional development was not deemed sufficiently reliable and needed additional levels of follow-up to be authentic. They feared that teachers could be misled by data that was not formally supported.

**No supervision or facilitation.** Having a huge amount of autonomy to participate in multiple episodes of inquiry did not appeal to at least three of the participants. Similar to Charles, Lucy, for example, likened the inquiry process to taking an online class. She asserted, “I don’t like having to teach myself, to be honest.” She compared the experience to reading a book and only having the author’s perspective. On the contrary, she preferred to have lots of input from other teachers in a face-to-face, collaborative setting along with a facilitator to guide the process.

**Unreliability and navigation of Internet sources.** Equally concerning to the dissenters of inquiry was the skill to assess the validity of educational Internet sources used as source material for experimental work. These participants appeared intimidated by the voluminous amounts of information available online and wanted an experienced curriculum professional to assist with determining reliable and current information versus unreliable materials in an experimental manner.
Time consumption was another factor of concern in attempting to filter materials for problems they sought to solve during an inquiry project. According to Nancy,

You have to be organized. It’s not something that you can just decide you want to do. I guess, for me, I feel like when I want to change things up or try things, I have to spend the time doing the research, figuring it out, doing it ahead of time first, seeing what the kids are going to have problems with, and finding the time to do all of that. Then also, just looking online…there’s a million things out there and just kind of going through things and kind of cut and pasting different things together to create what I think I want in my class.

For Nancy, there were no clear guidelines, so figuring out focus areas and matching them with relevant and reliable research proved burdensome.

**Perception of low completion rate and minimal follow-through.** Although seven participants affirmed their preference for inquiry as job-embedded professional development over stand-alone workshops, during member checking, all participants cited reasons this model might not appeal to their colleagues in general. Ashton forecasted that the inquiry process might be rejected by “teachers who are resting on their laurels.” He insisted that these individuals might be resistant because they are typically not receptive of learning from failure.

Furthermore, while Tim did not share this sentiment, he expressed a couple of drawbacks to job-embedded professional development through the eyes of his peers. He asserted,

…sometimes people might not feel like they have a lot of guidance in that. They don’t know what to choose. I didn’t feel that way—thankfully—but I do know several teachers who did. I think another drawback could be the fact that it feels more massive. If PD is something that happens from 3:00 to 4:00 on Thursday, and it happens once a month, it’s
like, I can do that. Something that weaves its way in throughout the rest of the week is sometimes a little bit more intimidating.”

The overall sentiment was that a timed-workshop session was easier to commit to than a continuous flow of on-the-job activity.

Participants who rejected the inquiry model as a practical and sustainable form of professional development appeared to be concerned that its reliability was systematically weak. The inability to track sound empirical evidence without formal monitoring was troubling to them. One participant was fearful of the time commitment that could end up being a waste if the outcomes were futile.

Participants who accepted the model as valid, autonomous and fruitful had concerns that teachers who were afraid of failure might be reluctant to attempt inquiry-based projects. The resistance could be attributed to minimal guidelines and an unspecified duration for projects.

While three participants were clear in their rejection of inquiry as a form of job-embedded professional development, the other participants who preferred inquiry were also mindful of the drawbacks, even though they did not share those views. It was evident that the dissenting participants had little faith in their inquiry projects as evidenced by Charles’ perceptions of limited validity of results, Fred’s fear to experiment with a time-consuming, potentially non-valuable endeavor, and Lucy’s dissatisfaction with a unilateral project. While the dissenters found some merits of activities within the inquiry-based projects, as a whole, they did not perceive it to have long term impact on their professional learning.

**Theme 6: Learning by Experimentation and from Life Experiences**

Participants noted that theory and training alone were insufficient to prepare them for the practical nature of the classroom. They acknowledged that most of the decisions they made on a
daily basis were based on on-the-spot experimentation or lessons learned from their own life experiences. They posited that experimentation came out of need—unexpected circumstances for which there had been no formal preparation. While the participants’ experimentation occurred in various forms, some common threads were present in their experiential learning: navigation by trial and error, pulling life lessons from previous work experiences, and balancing the professional workload.

**Navigation by trial and error.** The participants noted that at first their instructional environment felt like a “maze.” They were not only burdened with classroom responsibilities but also department and site obligations. They expressed that it took a considerable amount of time to prioritize their duties in the appropriate order. Notably, the classroom became their primary focus, but even within the classroom there was much to learn and expedite quickly.

All of the participants reported that they had to “learn from what went poorly, trashing it, and trying something new the next time around.” Tim made an apt comparison between student learning and teacher learning: “When something goes bad we like to change that around the next time ... I think students do the same thing and in that way we're very similar to our students.” The participants appeared to develop a philosophy of teaching and learning: They taught students how to learn, and by navigating through that process, learned how to teach.

Ashton’s argument for the benefits of trial and error was that learning comes from “doing” and investing in “huge amounts of time.” He cited Malcolm Gladwell’s (2011) premise that it takes 10,000 hours to do something at an expert level. Now that he is in his sixth year of teaching, he approximated that he has only completed 6,000 of those hours, leaving him with 4,000 more hours of experience to complete before he can claim mastery. He offered that learning the nuances of the profession was helpful in becoming fully skilled. He noted that
people who are not in education do not necessarily understand what it takes to stand in a
teacher’s shoes. Ashton, along with other participants, had grown to realize that there are no
shortcuts to professional learning. Upon entrance to the teaching profession, Ashton readily
accepted that learning how to teach was inextricably a lifelong process.

Another perspective came from Carmen, a natural investigator by virtue of her scientific
training. She compared her trial and error approach to the laboratory experience. If
experimenting with certain strategies did not work, she recommended conducting an assessment
of potential reasons for the failed outcomes and trying again:

You tried something and [after that] you consider, how can you go back to fix it and
make it better the next time around? What can I do different to make it better? I think
that’s part of science, scientific method. [So], if your experiment doesn’t work out [as
planned], you have to figure out what part didn’t work and you fix that. Maybe you have
to add another step … [or] you have to use a different component in that experiment, and
maybe, then, it’ll work. I always have to remind myself of those things.
Like Carmen, most participants noted that the learning came from mistakes that were made,
being in the moment when failure occurred, and rising from that issue with a “lightbulb”
experience.

**Pulling life lessons from previous work experiences.** Since four of the ten participants
came from previous careers, they brought their unique real-world perspectives to the classroom
through which they could view student learning by a different lens. Others who had only been in
the teaching field pulled from their student teaching and internship experiences.

Lucy, a former law enforcement officer, expressed that her work with teenagers in the
juvenile system exposed her to the potential belligerence of high school students and the low
level of reading skills that many maintained. In addition, she had taught the drug education program for many years and served as a guest speaker in K-12 classrooms. Therefore, she was not particularly concerned about classroom management as a new teacher. Referring to law enforcement parlance, she thought she had “command presence.” This command presence, however, did not eliminate the problem “with them [students] not doing what I told them to do.” This was the first time in her career when she gave an “order” and there were instances of non-compliance. She remarked, “I actually almost sometimes would reach for my radio.” She soon realized, however, that there was no backup to call and “giving an order was about the most ridiculous thing [she] could possibly do. That was a shock to me.” Lucy had to revert to her leadership skills as a sergeant to figure out practical solutions to her classroom management problems. The goal was to succeed in having a working relationship with her students. Accustomed to using simple communication principles from law enforcement training, she decided to implement a similar system in her classroom.

Fred, who had made it through the ranks, ranging from custodian to campus security supervisor, to substitute teacher to intern teacher, and now fully credentialed teacher, shared his rise to teacher as an inspirational mechanism for students. Given that he was knowledgeable in discipline policies and had interacted with various circles of education personnel, he engaged both his general and special education students through stories about his own life experiences and how he used education to become a professional. Fred indicated that he routinely cited examples of individuals who triumphed over learning disabilities and other challenging circumstances to demonstrate to the students that there was no excuse for dropping out of school. Fred has discovered that this personal connection with students built strong relationships with
them, and the loyalty that it bred enabled him to maintain students’ engagement in the curriculum.

Ashton, a former advertising executive, believed he brought people skills, working with diverse groups, time management and strong communication skills to the classroom. Nevertheless, he quickly recognized that working with students, who are minors, took on a great level of responsibility, in that, “one’s rhetoric and communication have to be measured carefully to have a clear and impactful effect on student learning.” Thus, he discovered that communicating with students was different from communicating with his former adult clientele.

Emily, who had worked in the healthcare industry, supervised recent high school graduates in her former line of work, and had noted, then, that many did not exhibit workplace skills. Against this backdrop, she incorporated projects into her curriculum from which the students could connect with business and industry. For example, students were required to compose a professional resume and complete a job application form in a professional manner, followed by mock interviews. Emily discovered that those types of real-world application lessons proved meaningful to the students, and they behaved more maturely in class as a result, which ultimately, uplifted their classroom engagement.

Carmen who had participated in student teaching was introduced to the classroom environment then, but she claimed her best learning came from teaching chemistry to a group of elementary level students during a university project. Watching them rise to the occasion energized her spirits to work in the high school science classroom. Tim, who reportedly had worked under the tutelage of a master teacher, stated he learned more about teaching from her in one month than he done in his teacher preparation courses. Charles came from a multi-subject, elementary environment but still found benefit from that experience within his foreign language
classroom. Winston who had been an intern felt that he had been “thrown to the wolves.” He opined that training he should have received as an intern was never given to him until he was ready for induction, so he had to use common sense as a guide.

**Balancing the professional workload.** Given all the obligations to which the beginning teachers were beholden during their induction years, time management became a crucial component to their success. Besides lesson planning, instructional delivery, and student work assessments, they had to maintain an evidence-based portfolio that complied with the California Standards for the Teaching Profession in order to be recommended for the clear teaching credential. Hence, balancing the professional workload was another area in which the participants had to be experimentally creative.

Four participants reported integrating personal and professional commitments with little challenge while others struggled. Valerie reported that she prioritized the most important things by sacrificing personal activities that would have been at the forefront of her routine. In doing so, she maintained a calendar and kept strict deadlines. Carmen reported that the administration of the induction program kept her accountable by breaking down the expectations and responsibilities into monthly chunks. Thus, she strived to envision the big picture of induction completion, but did not overwhelm herself by thinking everything had to be completed in a short time span.

Expressing that he had been a strong time manager prior to entering the teaching career, Tim felt he did not have great difficulty with time management in relation to meeting induction requirements and maintaining his instructional workload. Based on lessons from prior life experiences, he advised that procrastination could consume one’s ability to meet deadlines. Nevertheless, he felt that some of the work “felt busy,” and he would have preferred that each
induction task added meaning to his instructional practice, without having to spend extra time doing them.

Evaluating how she was able to manage her work load and induction responsibilities and still maintain a healthy balance, Lucy appeared to have much success with this aspect of her practitioner development. Revealing that she had spent years as a parent and was now an empty-nester with much time on her hands, she asserted that she separated home life from work by arriving early to school and remaining there until her work was completed. Knowing that her first year as a teacher would be “crazy,” she did a huge amount of pre-work before the year began, such as writing lesson plans and organizing materials in folders.

Ashton, however, in his reflection on work balance, recalled that during induction, he had to juggle managing his classrooms as well as delivering the products necessary for completing induction. He characterized the time frame as an evolution, stating the following: “Year one, survival. Year two, improving. Year three, getting more efficient. Year four, managing time. Year five, managing others.” Fred also had difficulty with time management. He emphasized that the induction coordinator’s patience was of paramount importance, given that he had always wrestled with time management, resulting in delays with some assignments. He also mentioned struggles with organization because he did not always have deadlines memorized or recorded. He reflected that his experimentation with time management solutions were not always successful.

**Theme 6 summary.** Learning through experimentation and from life experiences had great meaning to the participants. Reportedly, having to navigate by trial and error and experiment for solutions within their work environment proved beneficial to them. Whether they came to the profession with skills from previous careers or felt imbued by their disciplined mindsets, the participants were cognizant that experimentation and life lessons proved valuable
in their day-to-day decision making in the classroom. From learning through failure, and trying again, to background experiences and balancing their professional workloads, the participants incorporated their experiential skillsets into their practice as an attempt at enabling a feasible work environment for professional success. Others who had limited experience relied on their gut instincts and learned mostly by doing, ensuring that they were destined to learn from any mistakes they had made.

**Theme 7: Current Practice is the Ultimate Payoff**

Throughout the interviews, participants expressed that the ultimate payoff from the induction experience was that they were currently reaping its benefits. Each participant indicated that the period was riddled with challenges, time-consuming tasks, and stress, but delightfully maintained that the investment was well worth it.

At the completion of induction, Fred, for example, felt that he had earned additional competence in his instructional practice, and exiting the process “felt like another feather in his cap.” Nancy thought induction was very helpful, albeit the overwhelming feelings she often endured. While Carmen admitted that she was not engaged by every single induction professional development activity along the induction journey, she gave strong praise to the induction program as the catalyst that propelled her to acquire a repertoire of instructional strategies for delivering the curriculum to students. Tim appreciated the time spent with colleagues, the relationships he built with them, and the personalization of the process through the medium of a support provider who observed his instruction. More specifically, however, the payoff was strongly manifested in their content area classrooms described below via participants’ teaching assignments at the time of the interviews: math, science, English language arts, science, world languages, and special education.
Math. Winston, the only math teacher participant, entered the teaching profession as an intern. As such, he had minimal coaching from a mentor during his intern period. Upon gaining eligibility for the induction program, Winston entered with some degree of bitterness. He felt “thrown in the fire” without adequate preparation during the first year. He surmised that the official induction program would have been beneficial to him, if he was allowed to participate as an intern. Much of what he learned in the induction program were the tools he needed when he struggled as a brand new intern teacher.

Nevertheless, being one who appreciated lifelong learning, he capitalized on the knowledge and support gleaned during the induction phase. One learning experience that Winston shared, which is now a hallmark of his current practice, was leading his students to take responsibility for their academic achievements. Experience with the AVID inquiry curriculum and his own induction inquiry project had reportedly made him a better learner. He wanted his students to follow the same path. He loathed spoon feeding students, particularly in math that requires significant levels of critical thinking. He refrained from saying: “Here’s the notes; you learn from the notes.” Instead he advised,

You have to really think about them, and …give the students time in class to work together and collaborate, to figure stuff out on their own. Because I can tell them everything, but they’re not going to internalize it, if I just do that.

Winston’s philosophy was that it is important to let students fail sometimes. He believed that in doing so, they would figure out why that had occurred, and how they could bounce back using their own initiative. He wanted his students to reflect, figure out what went wrong, ponder how it could be fixed, and determine how they could do better. He admitted adapting to this learning
style from the induction process and has incorporated its features into this current practice for the
benefit of his students.

Science. Two participants, Carmen and Nancy, taught science. While both teachers
enjoyed experimenting with new ideas, Carmen relied on traditional research processes to learn
about emerging practices, whereas Nancy preferred reaching out to her peers. Nevertheless, both
acknowledged that the induction system taught them how to build on their pre-service
knowledge.

Nancy has learned that keeping students busy with worksheets was counterproductive. Based on her inquiry experience in induction, she wanted her students to benefit from this
method, and has revamped her lessons to include critical thinking and project-based style
lessons. She has now eliminated “petty assignments” and replaced them with “things they have
to design [like] their own labs, or they create their own assignments, or I give them questions to
look up.” Nancy has strived to make her instruction more personalized and differentiated. She
learned in induction that students need to have concrete experiences to sustain their learning.

Carmen expressed that the inquiry process from induction has remained common practice
in her classroom. She has implemented several Common Core standards and, through her own
research of state policies and mandates, has kept abreast of up-to-date curriculum information for
her students. As a science practitioner, she has participated in the Next Generation Science
Standards state meetings and has closely followed the drafting, development and adoption of the
framework. Further, she named the induction standards that dealt with special populations and
English learners as critical pieces that guided her practice in differentiating instruction and has
expressed significant benefit in implementing them in her current practice.
**English language arts.** Three participants, Ashton, Lucy and Tim, taught English language arts. Ashton taught upper level English (seniors) while Tim and Lucy worked with the lower grades (freshmen and sophomores). Both Tim and Lucy lamented that working with cooperative groups was not as simple as it appeared. According to Tim, most people believe, “You just get them into groups, and they do what they're supposed to do and practically that’s not how group work works.” As a result, Tim avoided groups early in the school year until he was reasonably assured that his students were well-behaved.

Similarly, Lucy did not employ cooperating groups during her first semester of teaching because this strategy was not in her comfort zone. However, during the second semester, she attempted them and reported, “I hate to say it. I really hate to say it. It made my job easier. I don’t know…I guess it made it easier for the students, then. But, I’m saying it made my job easier because…they enjoyed it better.”  Lucy and Tim, after having sufficient practice and mentor observations during induction, now seamlessly integrate this strategy in their instruction.

Ashton contended that in an attempt to obtain student success with Common Core strategies, he modeled lessons from his inquiry project as a means of demonstration. He explained that he regularly embeds critical thinking activities in his classroom, such as philosophical chairs; reading complex, non-fiction texts; and annotating them for analysis. He considered critical thinking to be a type of inquiry that is applicable to students’ lives. As he did in his inquiry projects, he employed essential questions for student investigation in class projects, with the aim of generating higher levels of critical thinking.

Upon reflection, Ashton noted that during his first years, he wanted a quiet classroom as a representation of order and successful classroom management, but it was at the cost of boredom and forced engagement of the students. Ashton, reportedly, transitioned to a shared,
student-centered environment, which afforded collaborative space: “I have students coming in
excited to talk about what they read last night. They lead discussions, and we don’t know where
it is going to go.” He viewed this shift as a metamorphosis that has allowed the classroom
environment to thrive organically. He now appreciates student noise as valuable engagement
compared to his initial stance of “lost-control.”

**World languages.** Two participants in the study taught world languages: Charles,
Mandarin and Valerie, Spanish. Charles noted that, having engaged in group projects, inquiry,
and collaboration during the induction phase, he feels confident in modeling these strategies for
students as he strives to implement the Common Core. He does role-playing, rearranges seats for
a student-friendly environment, uses videos for demonstration, collaborates often, and scaffolds
learning as his students find engagement in learning Mandarin.

In addition, Charles learned early in his practice that students needed a reliable and
consistent system for classes to run smoothly. For example, he designated specific trays for
homework, turned in by class period, and later displayed student work either on the walls or from
the ceiling. Charles also learned the importance of rubrics when his students did not adhere to his
multiple rounds of verbal instructions during assigned projects. He claimed, “If I verbally give
instructions, half of them will be lost. You have to have a writing rubric… [that’s when] the
lightbulb turns on. You need to have a detailed rubric, scoring sections on each thing [that you
assign].” He is now convinced that putting instructions in writing provides concrete
understanding for students.

During the Assessment of Teaching and Learning module, Valerie requested that her
support provider observe student comprehension during a lesson. The observation process was
invaluable, and Valerie followed the recommendations of blending various modalities of appeal
to students that included videos, listening, and speaking. She has discovered that over the years, students appreciate visual appeal and routinely uses short video clips to present content before proceeding with her Spanish lessons in which they actively listen and speak.

**Special education.** Two teachers, Emily and Fred, taught special education. Building on the foundation that Fred had acquired in the Context for Teaching and Learning module, he identified the need to “make the classroom a place where kids can’t wait to be there, where I’ve got to make them leave.” As a result of that desire, he created a program called Radical Reading. In this program, students come to his classroom to read for an hour after school to earn 100 extra credit points toward their grade. His goal was to make his students strong readers, especially those who hate to read. He wanted students to know that “reading is a lifelong skill that will take them to vocational school, college, a good family life, and a career.” Fred wants his students to move beyond their learning disabilities and continues to motivate them to aim for high accomplishments.

Emily, likewise, placed great emphasis on intrinsic motivation. She empowered students with regular incentives so that they are not blindsided by their learning disabilities. During induction, she recalled having her students

…create weekly goals on what it is they want to accomplish each week, maybe they're failing in another class. I have seniors, so maybe they need to do credit retrieval. I usually have to help them come up with goals, their own personal goals. Then of course, the following week to go back and revisit, review and see what they've accomplished.

Induction, according to Emily, prepared her to set the stage for student learning. She rationalized that goal-setting was a powerful skill to generate the learning process. She reported great success with this practice.
Theme 7 summary. Participants reported that the challenges, battles, and experiential learning that they had undergone during induction were deemed a fundamental investment in learning how to teach. According to the participants, current successful practices were the ultimate payoff. Time spent in trainings, collaboration with peers, and reflections with their support providers all proved to be valuable in the development of instructional practices, utilized in their content areas.

In the content area of math, the participating teacher reported utilizing AVID and inquiry strategies to get his students to accept failure as a part of learning. In science, one participant found investigative and inquiry were high-yield strategies for her practice, whereas the other relied on best practices from other teachers and her own research. In English language arts, participants extolled the virtues of cooperative groups, analyzing complex texts and investigative projects. The two world language teachers utilized manipulatives such as Thinking Maps, visuals and listening and speaking strategies. Finally, the special education teachers emphasized skills for real-world applications, such as job applications and expanded literacy opportunities.

Theme 8: Nurturing Experiential Learning

Learning from experience and reflection is the crux of experiential learning and emanates in the literature as far back as Dewey’s progressive movement, delineated in *Experience and Education* (1938). Participants, notably, had several opportunities to learn from their trial and error approaches and routinely reflected on the results, with nurturing support from a number of entities. The interpretation of the “nurturing” experience varied among participants, with some citing specific individuals and circumstances, and others, placing more importance on the culture and climate of the school environment. Factors that emerged included: site administration, experience with support providers, and family and peers.
**Site administration.** Participants in the study represented five of nine high school sites within the districtwide induction program: Aardvark High School, Armadillo High School, Meerkat High School, Macaw High School and Venus High School (all site names are fictitious).

Most participants indicated that their site administrators played an integral part in their success, with little or no drawbacks. Nancy felt a strong nurturing experience at Venus High School because the principal led a new teacher cohort meeting each month. In those meetings, she and other “new” teachers to the school discussed their needs for successful practice. Nancy was particularly effusive with praises for her the principal and his administrative staff:

> He would pop in my room just to ask if I needed anything. He [and his secretary] were very welcoming… If I had a silly question or I didn't know where something was, I felt very comfortable to approach them, or just e-mail them informally, and not feel like it was a big deal.

Nancy’s satisfaction with her site administration spurred her self-confidence as a valued member of the faculty and inspired her to reach out to veteran teachers as she continued to experiment with new teaching strategies.

At Aardvark High, Charles, Fred, Lucy and Valerie felt generally supported by their administrators. Lucy expressed that she had easy access to them, but did not necessarily feel that they made a special effort to reach out to the beginning teachers. Valerie spoke of meaningful professional development that administrators conducted and the follow-through that they delegated via their instructional coaches. Fred expressed great comfort in his interactions with site administrators, indicating that he frequently invited them into this classroom to observe his lessons and requested constructive feedback.
At Armadillo High School, Tim and Winston gave excellent commendations to their principal whom they considered a strong role model for educators. Tim attributed his early success to his principal’s nurturing efforts. She provided him with additional technology and supplementary resources, after noting his interest and competence in technology integration, such as a cart of 40 iPads for student use in his classroom. Winston, equally praised his principal for her support and advancement toward his career: “I feel very blessed. I think our administrative staff [and principal] are phenomenal. If she gets, transferred … I'd follow her wherever she goes. She's amazing. I feel like she’s given me all kinds of autonomy.” Winston’s appreciation for his principal indicated that, despite all other challenges, he knew his principal would secure his best interests. Carmen, who also worked at Armadillo, perceived that she was well-respected by her site administration. She sensed that being the only teacher with a Ph.D. in her science department afforded her great respect for knowledge within her content area, and she gained much autonomy as a result of her expertise.

At Meerkat, Ashton did not particularly deem site administrators a nurturing factor, neither did Emily at Macaw. However, it appeared that the administrators at these sites provided the enabling environment and tools for their development for which they were grateful.

**Support providers.** All participants categorically cited their mentors, known as support providers, as the primary nurturing ingredient for their success. Support providers, who maintained their full time jobs as teachers, performed mentoring tasks as extra duties under a stipend agreement with the district. As part of their contractual agreement, they were required to be in contact with beginning teachers once per week, either by phone or email, along with one face-to-face meeting per month. In addition, support providers made drop-in visits as they were available, but were required to do at least two formal, class period-long observations per year. It
was during these observations that the support providers identified areas of weaknesses and areas of strengths in the classroom followed by feedback to the beginning teachers.

Participants reported that, in their support providers’ efforts to nurture them as beginning teachers, their mentoring services often surpassed job requirements. Participants, whose support providers were on their school sites, felt very privileged to unfettered access. Others who did not have their support providers on the same school site still found ways to connect and did not feel marginalized by their absence. Lucy indicated that her off-site support provider regularly communicated with her via email, and asserted, “It didn't matter that he wasn’t on campus. I couldn’t say it would be better with someone there or not.” She characterized him as a dedicated mentor whom others wished they had and indicated, “We taught the same content, and he gave me a lot of stuff.” Reportedly, Lucy’s connection with her support provider propelled her ability to grow as an experiential learner.

Support providers assistance ranged from counseling support to organization of classroom materials. Charles, for example, reported having a strong jump start from his support provider with organizational skills: “She helped me give every single kid a folder, and then label it, and put every single work I ever collected into that folder. If they [induction program] ask you for any evidence, you just get it from the folder.” This system enabled him to not only build his evidence of practice but also a portfolio of work for each student. Another participant, Nancy, also expressed the stamina she developed from her support provider’s nurturing:

Those first two years were very hard, but I knew that no matter what, because of all the support I had from my support provider, because of all these tools that were given to me, I know that no matter how hard a year gets I can always get through it.
Nancy and other participants felt empowered by their support providers’ encouragement and their services proved to be one of the most powerful nurturing elements of the induction program.

Classroom observations by support providers proved meaningful to all participants and set the stage for further experiential learning. Winston recalled his satisfaction with the process as follows:

That [observation process] was very useful. The most important thing was… I wanted an extra set of eyes, on the other side of the room, perhaps. You find out after you start circulating the room, who’s taking notes, who’s on task. You can tap them on the shoulder, tap on their desk, and get them working, [but you can’t see everything]. . .So, when I was on one side of the room doing my thing, talking, [name of support provider] could see what [the other students were doing]. He was just a fly on the wall, the kids pretty much forgot he was there, and he could tell me, “Okay, these kids were really engaged… these ones not so much.”

Based on Winston’s recollection, the observational process appeared to be of benefit to him, and similarly, to the other participants, due to the two dimensional approach that it offered. All participants reported making modifications for instructional improvements afterwards in areas, such as classroom management, seating charts, grouping, and differentiated instruction.

**Peers and family.** All participants emphasized the importance of having peer support. Throughout the interviews, they mentioned that knowing that others were going through the same experience was reassuring for their emotional satisfaction. Tim contended that the collaboration with peers during the induction process was definitely a plus to teacher development. He asserted that the relationships that were built during that period, as teachers
worked together as a cohort, generated lifelong networks that are necessary for collaboration during the challenging times. Fred strongly recognized the importance of the networking experience, feeling that there were always approachable individuals whom he could contact for assistance. As he asserted,

    We were a team in the induction process. Not just at the table, but as a group, we were a team, and so you knew you weren’t alone. Now that I’m not in induction, I know still, I am not alone. There are always folks who walked that exact same path.

This assertion indicated that a family-centered feeling permeated the perspectives of the participants toward their induction counterparts. Each one felt beholden to uplift each other.

    Besides peers, a couple of participants mentioned family members who also helped to nurture their experiences. Ashton noted that his mother—an educator—and in-laws played a role in nurturing his beginning years. Lucy shared that her adult daughter was also participating in induction at the time she did, and mentioned that they exchanged notes and discussed shared experiences. Being surrounded by an array of personal and professional supporters, reportedly, enabled these participants to have a sounding board for ideas and questions.

**Theme 8 summary.** Participants of the study reported being nurtured along the induction path by site administrators, support providers (mentors), peers and family. Notably, the level of nurturing varied among site administrators: three participants named their principals as having contributed outstanding support to their development; the remaining participants reported that their administrative staff provided the enabling environment but there were no significant efforts to nurture them. Reportedly, elements of frequent communication, meaningful classroom visits and just-in-time support were available from support providers. As well, peer-to-peer support
through team work and an established learning community bolstered experiential practices.

Three participants also cited family members as another source of nurturing.

**Theme 9: Obstacles to Induction**

Given the job-embedded nature of the participants’ induction experiences, they expressed the need for professional learning that would have a direct impact on instructional planning and classroom management. They desired practical, hands-on experiences that would keep them engaged and enthusiastic, so they could return to the classroom “fired up” to experiment with new strategies in their instructional spaces.

At the core, they yearned for professional learning that was differentiated according to their unique needs. They expressed their dissatisfaction with workshops that had no relevance to their learning environment and rejected the one-size-fits-all approach that they had come to meet in the educational system. The advantage they enjoyed with the job-embedded nature of induction was being able to work with a support provider as they were trying new strategies and coming to term with their own weaknesses.

While most participants indicated that the majority of their needs had been met in the induction program, there were a few obstacles that surfaced as areas for improvement: practical and time-sensitive orientation, flexibility for intern teachers to enter induction throughout the school year, gathering of evidence items, and streamlining advanced degree enrollment with the induction process.

**Practical and time-sensitive orientation.** Participants reported that while they appreciated the district’s attempt to hold an orientation, a one-day meeting for beginning teachers to train them on district policies and procedures, participants found the training overwhelming, and too generalized to enable a simple assimilation into the district as a new employee. Their
perception was that many of the informational topics, such as special education and English learner policies, were overly complex and not immediately relevant to their needs.

Similarly, the school site’s level orientation, typically a day after the district orientation, was not particularly helpful. At least one participant lamented that the bulk of the training about departments, site personnel, and resources that he needed for initial support did not come to him in a timely manner. It was not until two weeks into the semester that he received practical information with which he was able to match faces with names, and be aware about policies for taking student attendance and other mandatory requirements.

**Flexibility.** Participants reported that there was a lack of flexibility in the program on a few fronts. First, intern teachers who became eligible for induction after the enrollment period had passed were unable to enter the program until the next school year began. This created a gap in mentoring services to the teacher, leaving him or her without a formal support system. One participant who had this experience expressed feeling left behind his peers. He reasoned that by the time he started induction, he had figured out some of his challenges by himself, which could have been made easier if he had the opportunity to utilize the systematic tools that the program provided.

Secondly, at least one participant expressed that there should be flexibility with monthly meeting times. He contended that two-hour meetings after school were too lengthy for beginning teachers who were already pressed with challenges and burdensome tasks. He found this an obstacle to meaningful learning, since by the end of the first hour of the meeting, he estimated that most teachers were too exhausted to focus on induction activities. He suggested that there should be multiple meetings during the month held no longer than one hour at a time. He also offered that online meetings could be another option to face-to-face sessions.
**Gathering of evidence items.** At least three participants found the online portfolio requirement time-consuming. They found the request for multiple evidence items repetitive and overwhelming. Their perception was that time spent gathering evidence took away from their ability to focus on lesson-planning and conducting assessments. They reasoned that the paperwork needed to be reduced because the process of compiling the portfolio often superseded the learning it was meant to provide. They loathed its voluminous nature, deemed a symbol of the burden they often carried.

**Streamlining advanced degree enrollment with the induction process.** At least one participant reported that the induction program was not aligned with higher education degree programs, and as such posed a burden to him. He posited that the induction process should have been streamlined with his master’s program so that he would not have to attend meetings or compile the same portfolio as his peers. He offered that some form of alignment needed to be articulated with institutions of higher education and the induction program so that the beginning teacher does not have to be burdened with the demands of both requirements simultaneously. He found that there were overlaps in both programs and recommended that measures should be taken to streamline both.

**Theme 9 summary.** Participants stated that despite the benefits of the induction program, a number of obstacles needed to be addressed. Practical and time-sensitive district and site orientations surfaced as areas of deficiency as well as lengthy after school induction meetings. Absence of flexibility within the program to enroll beginning teachers throughout the year was deemed problematic for individuals who had no mentors or support during this phase. In addition, time spent on compiling an evidence binder was perceived as burdensome and needed
to be reduced. Lack of efforts to streamline higher education enrollment with the induction process was also a factor that emerged as a deficit.

**Theme 10: Managing the 21st Century Classroom**

The 21st century classroom is filled with complexities that are different from previous eras (Reeves, 2010; Zhao, 2010). The participants noted that rapidly changing technology is one of the multiple areas that teachers must be prepared in to be innovative for the dynamic environment in which students learn. All participants indicated policymakers made the right decision to mandate induction as a requirement for credential clearing. They rationalized that beginning teachers might not participate in induction if it was voluntary. This, according to the participants, could be attributed to not knowing about the complexity and challenges of teaching. Participants indicated that they felt only partially ready for this type of dynamic environment and expressed the following:

Charles: He asserted that the induction program provided training and resources for the complex, 21st century classroom. However, he felt that although districts were investing in this endeavor, they are not pushing teachers to use the tools or making them accountable for integrating them in the classroom. He surmised that teachers “don’t want to step outside of their comfort zones” and often limit themselves to potential advancements.

Nancy: While she believed the district is not altogether ready, she stated, “We are getting there.” She expressed that Professional Developments over the last couple of years have been technology rich and teachers are getting more comfortable with the tools. She cautioned, however, that PDs on too many technology tools at once can be overwhelming for some teachers, and recommended that teachers start with a few tools and succeed in using them before trying to learn everything at once. In addition, she emphasized that teachers should also be
prepared in the classroom management that comes with technology implementation, since these tools need to be controlled like everything else.

Emily: While she believed that she has received some preparation for teaching students in the complex society of the 21st century, she still has certain variables to contend with in her academic setting that make the instructional work challenging. She noted that, given her students’ disabilities, they come to her with low functioning skills, which often prevents her from taking them to higher functional levels for the 21st century economy. She puts forth her best efforts under the circumstances but needs additional support to adequately prepare her students.

Lucy: She believed that the induction process is on the right track with 21st century preparation. However, she contended that teachers are not being prepared to teach students endurance skills that they need for careers. She thinks there should be greater balance between preparation for college and preparation for career. She expressed that neither the credentialing program at the university, nor induction in the school district, did a good job of preparing teachers to address students with life skills that will resonate with them during challenging periods of adulthood.

Winston: He believed that pockets of valuable information have been disbursed during induction, but beyond that period, training tends to occur during voluntary professional development activities. However, because the follow-through is poorly conducted, teachers are not held accountable for learning the skills necessary to prepare students. In addition, teachers have multiple initiatives to implement constantly and may not give as much attention to any specific skill deemed necessary for 21st century learning.

Tim: He believed that he was prepared, but he did not think that every teacher was prepared. He felt prepared because he was confident in his ability to use and teach students how
to use technology. Further, he considered this lack of teacher preparation a big gap in schools because if teachers are unprepared to use the tools in the classroom, their classroom management of student use with the tools will be weak. He contended that there needs to be more differentiation in PDs that attempt to train teachers in technology because the younger generation of teachers tended to be versed in it, whereas some veteran teachers have fallen behind.

Ashton: He offered that for teachers to be prepared for the complex society, institutions of learning should communicate with industry far more than they currently do. Having entered education with training and career experience from the business world, Ashton quipped,

This SMART [specific, measurable, achievable, relevant, time-oriented] acronym [that we are now using in education] is funny. I was laughing my first year because I'm like, ‘That's all you learn in business school and in marketing plans and doing business.’ Now the schools are using that mentality. I can see that there’s been some collaboration between private industries and schools and necessarily so because we’re trying to get kids prepared and not think just the schoolhouse way, but the worldly, global way. Ashton’s mantra is that schools should model more business practices to emulate the real world. He also surmised that the collaboration experienced during induction is a powerful model for teacher development that can be readily transferred to students.

Valerie: She argued that the K-12 system is about 10 years behind corporate America. She admitted that she can observe the disparity of practice between industry and bookwork in classrooms:

We’re trying to move in that direction little by little, baby steps. There are some teachers that are very tech savvy in a sense… It's just not tech… It's doing all the different types of activities, collaborative work, that's important. You have to learn to work with others.
Valerie’s approach, albeit positive, suggests a slow progress, but she appeared hopeful that eventually, more teachers will come on board.

Fred: He conceded that preparation for the complex 21st century was offered during induction, but suggested that it was insufficient for the social needs of students today. He referenced acceptable norms that were not present when he was growing up, such as embracing homosexual and transgender students. He also mentioned the emergence of multiple technology tools that have been incorporated into education, but remarked that the core teachers appear to get preference over elective and special education teachers. He believed there is disparity in who receives technology on both the teacher and student fronts. The trend, he noted, is to give the majority of the technology resources to the Science, Technology, Engineering and Math (STEM) efforts, creating gaps in other areas.

Carmen: On teacher preparation for a complex society in which students have to be prepared to exist and function in the 21st century, she asserted that many teachers will never be ready because the students seem to be ahead of the learning curve. She has experimented with what is available, but does not believe she has fully mastered any of the tools. In addition, she would like to know what institutions of higher education expect from K-12 students when they arrive at college in order to better prepare her student population.

**Theme 10 summary.** On preparation for the complex 21st century classroom, participants reported that while the induction program prepared them in many significant ways, there is much room for improvement, such as classroom management for technology integration, training that pushes students toward endurance for careers—not just college, training that addresses socially accepted norms that were previously non-existent, and improvement in equitable practices across core and elective areas.
Chapter V: Discussion of Findings and Implications for Practice and Future Research

The purpose of this chapter is to discuss the findings from the single case, qualitative study (Creswell, 2013) which explored the impact of a beginning teacher induction program during Common Core implementation in a California, suburban high school district. The study was conducted with ten former beginning teachers who had recently exited the induction program, over the time span of four months to two years. The teachers reported on their experiences with inquiry-based, job-embedded professional learning activities throughout their two-year induction term. As mentioned in chapter 4, ten themes emerged from the findings identified through the process of initial coding, in vivo coding and focused coding (Saldana, 2013). These themes, listed in Table 2, summarize the participants’ learning as experiential learners in their induction program, during the implementation of Common Core State Standards.

Table 2

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The chapter is divided into five primary sections: (1) Revisiting the Problem of Practice, (2) Alignment of Findings with Theoretical Framework, (3) Alignment of Findings with the
Literature, (4) Findings for Research Questions, and (5) Implications for Practice, Future Research, and Limitations. The chapter closes with recommendations for program improvement and the researcher’s personal reflections.

Section 1: Revisiting the Problem of Practice

I began this study to address the professional learning of teachers, generally reported in the literature, as episodic in nature and frequently unsupported after training events had occurred (Reeves, 2010). Given current paradigm shifts in curriculum, such as the Common Core (Guskey & Yoon, 2009; Kesson & Henderson, 2010), I wanted to explore the professional learning experiences of beginning teachers as experiential learners in an induction program to examine how they had acclimated to their instructional environments. I found that the teachers perceived their professional learning to be an amalgam of elements that included integration of background knowledge, interactions with peers, inquiry projects, and induction resources. As they reflected on their professional growth, participants admitted that concrete experiences in which they learned-by-doing served as the driving force toward success. Hence, their professional learning was not a one-shot venture, but a series of collaborative, inquiry-based activities that yielded a determination for self-efficacy (Clayton, 2007).

My research study was guided by the following overarching question: What is the induction experience for beginning teachers during the implementation of Common Core Standards in a California suburban high school district? I also investigated two sub-questions: What are the beginning teachers’ perceptions of job-embedded, professional learning and how are the needs of beginning teachers as experiential learners met (or not met) in the induction program?
Section 2: Alignment of Findings with Theoretical Framework

In reviewing the California induction program’s Plan-Teach-Reflect-Apply (PTRA) cycle (see Figure 1), various commonalities surfaced that were present in Kolb’s Experiential Learning Theory (Kolb, 1984). Hence, Kolb’s Experiential Learning Theory offered a sound framework consistent with parameters under which the beginning teachers’ experiences were examined.

The Kolbian theory portrays learning as a cyclical progression (Kolb, 1984). These characteristics include the conception of learning as a process, not an outcome; a continuous process grounded in experience; the necessity to resolve conflicts between dialectically opposed modes of adaptation to the world; learning as an holistic process of adaptation to the world; and transaction as an element of learning between the person and the environment (Kolb, 1984). There are four modes in the cycle of learning, according to Kolb: “concrete experience, reflective observation, abstract conceptualization, and active experimentation” (Turesky & Gallagher, 2011, p.6). These characteristics were portrayed in the participants’ perceptions of their job-embedded professional learning experiences within the induction program.

As noted in Figure 1, the PTRA model, adapted from Deming’s (1986) Out of the Crisis, is a cyclical frame in which the induction teachers performed their teaching tasks, understanding that the goal was to attain a systematic measure of continuous improvement. When compared with Kolb’s (1984) Experiential Learning Theory, similarities from the PTRA cycle emerged that could be identified as benchmarks during the learning-to-teach experiences. Notably, some features of the participants’ practice mirrored elements of Kolb’s theory as demonstrated during: Concrete Experience, Reflective Observation, Abstract Conceptualization and Active Experimentation, though not necessarily in the same cyclical order. A diagrammatic flow of the Kolbian theory elements appears in Figure 2.
Concrete experience. Given that perceptions of concrete experiences vary among individuals and in different contexts (Bergsteiner et al., 2010), the concrete experience stage of the model may have occurred during diverse settings within the teachers’ learning experiences. It is likely that these included real time interactions with students during direct instruction, monitoring cooperative groups, modeling exemplary work or activities, and assessing student work.

Nevertheless, the Kolb’s experiential learning theory does not clearly define the concreteness of experience (Miettinen, 2000; Bergsteiner et al., 2010). Hence, one participant’s concrete experience may differ from another. Thus, concreteness may occur during preparation for a lab, providing direct instruction to the students for the lab or the actual facilitation of the lab. Furthermore, the PTRA model includes planning as a precursor to teaching—the proposed concrete phase, which questions whether or not the concrete experience, as the model portrays it, requires some level of preparation or aforethought.

Reflective observation. The concept of reflection as a professional endeavor was etched in the philosophy of the induction program. Induction participants routinely engaged in reflective conversations with their support providers, online journal writing after induction meetings and professional development workshops, and throughout their inquiry projects. Hence, reflection resonated strongly with the participants.

Kolb’s (1984) treatment of reflection is one of a distinct phase, an observational period, where the learner moves from actor mode to observer analytical mode. Notably, participants remarked that reflection could occur under multiple circumstances: while working with a single student, within groups of students, during minute-to-minute explication, or an entire class period to multiple class periods, daily, weekly, monthly or annually. This notion aligns with the
characterization of reflection as a dual process: in-action or on-action. As noted in the literature review, reflection can occur on action, that is, “thinking through a situation after it has happened” (Merriam et al., 2007, p.174) or in action, that is, suddenly becoming aware of a new understanding of a previously held notion (Schon, 1987). Hence, reflection may occur at any given point along the learning cycle, and as participants noted, reflection was not complete if one did not act upon the new learning.

**Abstract conceptualization.** Kolb’s (1984) theory defines the abstract conceptualization component as “the creation of rules and strategies related to the experience.” This stage could be deemed as a second planning phase after reflection on the initial concrete experience had occurred. This might be the point during which flaws within the teachers’ concrete experience are identified and a second attempt for improvement is made through revision. New concepts are, therefore, developed and applied as solutions to problems, which may serve as the application stage that leads to future planning, aligning with the “Apply” stage of the PTRA model. Notably, if reflection is occurring “in-action,” this phase could be a brief moment as opposed to an extended period of deep philosophical undertaking if reflection occurs “on-action” (Merriam et al, 2007; Schon, 1987).

**Active experimentation.** The active experimentation stage of the model could be a multifaceted (Bickmore & Bickmore, 2010) phase, as opposed to a one time venture, that incorporates new learning, but the experimentation may occur over long periods of time. Kolb (1984) posits that the learner should be involved in decision-making and problem-solving during this phase, relative to the learning. Therefore, this might be the participants’ second or subsequent attempt at experimenting with improvements, intended to fix prior problem issues. Reportedly, the participants’ active experimentation was the build-up that occurred as lessons
came together and teachers were actually re-teaching them. However, critics question the description of this experimentation phase as “active,” wondering if there could be an “inactive” alternative to experimentation (Bergsteiner et al., 2010).

**Summation.** While Kolb’s (1984) theoretical framework contains elements that align with the Plan-Teach-Reflect-Apply (PTRA) model of the induction program, they do not necessarily have the same structure, or flow in the same order. Kolb’s concrete experience stage is the genesis of his experiential model, whereas the PTRA cycle begins with a planning phase as the precursor to the concrete experience. Moreover, the concreteness of the experience may be arbitrary and hard to define (Miettinen, 2000), since it is determined by each teacher’s perception and learning objective.

Moreover, Kolb’s placement of reflective observation after the concrete experience minimizes the potential impact of reflection on the learning cycle, since reflection can occur “in-action” or “on-action” (Merriam et al., 2007; Schon, 1987). He does not address reflection as ebbs and flows but as a discrete phase that is not necessarily triggered in other elements of the cycle. Furthermore, the theory does not acknowledge varying levels of reflections that could transpire rapidly in-action or during deep philosophical thought on-action. In addition, active experimentation can be a multifaceted (Bickmore & Bickmore, 2010) endeavor in which new learning becomes increasingly complex and extends over long periods of time, rather than in a single phase.

**Section 3: Alignment of Findings with Literature**

The focus areas for the literature review of this study included beginning teachers’ professional learning needs, beginning teachers as experiential learners, role of induction programs, teacher inquiry as job-embedded professional development, and transition to Common
Core. This section explains how findings from the study aligned with each component of the literature review.

**Beginning teachers’ professional learning needs.** Based on the findings described in chapter 4, teachers yearn for job-embedded professional development, support from mentoring, and collaboration with peers that address their unique classroom situational challenges. The literature revealed that beginning teachers enter the profession with a high level of theoretical knowledge (Feiman-Nemser, 2001; Darling-Hammond, 2006; Fry, 2007; Goodwin, 2012) but eventually discover that their teacher preparation is inadequate to satisfy the range of instructional settings in which they are placed in the real-world environment (Craig, 2013; Smith et al., 2012). This dilemma could be attributed to varying degrees of job-embedded contextual factors, such as demographics, learning styles, socio-economics, and grade level readiness within each classroom of students (Darling-Hammond, 2006). The literature, however, does not necessarily make distinctions between the needs of teachers who enter the field with varying levels of preparation, namely, fully completed preliminary preparation, preparation-in-progress, or no formal preparation at all.

As mentioned in chapter 4, participants in the study entered the teaching profession from diverse pathways: emergency permit holders, interns, student teachers, and for some, a second career. Ostensibly, teachers who entered the field on emergency or intern credentials with little to no classroom experience or other professional experiences had the most challenging struggles with teaching and learning. By the time these participants were eligible for induction, the process was perceived as stressful and burdensome, being one more thing to complete among the litany of credentialing requirements. Furthermore, beginning teachers often begin the professional journey feeling inept, as they come to terms that their burgeoning practitioner needs are
complicated and far outweigh their perceptions of what their classroom challenges might be (Hong, 2010; Van Hover & Yeager, 2004; Darling-Hammond, 2005). As a result, these teachers were in need of a bridge phase in which they could adequately learn the theory in teacher preparation programs, while engaging in supportive practicums, with mentors and peers, as they awaited formal induction.

Beginning teachers as independent, experiential learners. Despite feelings of isolation painted in the literature (Darling-Hammond, 2006; Goodwin, 2012), beginning teachers in the study asserted themselves as independent adult learners, who brought a rich blend of real-world experiences to school operations. Since scholars and practitioners recommend that professional development facilitators embrace tenets of adult learning theory (Knowles, 1980) as they facilitate experiential learning among beginning teachers (Curry et al., 2002; Snyder, 2012), induction programs should identify aptitudes generated from experiential background knowledge that teachers bring to the profession and use them to bridge the transition from theoretical preparation to professional practice (Ball & Forzani, 2011).

Beginning teachers who had entered the profession from previous careers drew on their background skills, such as communication, organization, goal-setting, and leadership. Those who had prior experience in their cooperating teachers’ classrooms during student-teaching tried out what they had learned. Those who had no classroom experience relied on involvements with children or skills from leadership experiences.

Role of induction programs. The effectiveness of induction programs varies by their administration, school culture, and quality of mentorship (Kearney, 2014). Reports from the literature indicated that induction programs have had successful results in retaining teachers for at least five years (Smith & Ingersoll, 2004; Ingersoll, 2013). Nevertheless, there is insufficient
evidence to indicate that induction by itself is a significant factor in supporting teacher
development and growth (Fry, 2007). As Smith et al. (2012) report, “even when program
supports for new teachers were intensive, frequent, and highly regarded, a poor school climate
and weak leadership could undermine the [induction] program” (p. 225). The literature
maintained that when beginning teachers had effective support from mentors and engaged in
collegial collaboration, the benefits went beyond improving stress, promoted teacher
development, and improved the quality of teaching and learning (Feiman-Nemser, 2012a).
Participants’ perspectives mirrored these findings as they expressed their satisfaction or
dissatisfaction with elements of the induction program.

On the effectiveness of induction as a process, participants expressed their satisfaction
with many of the features that were characterized as exemplary in the literature, noted in chapter
2. These features included mentorship, opportunities for collaboration, observations, release
time, opportunities for professional discussions and communication, and continuing professional
development (Kearney, 2014). In fact, California’s induction program was among the list of
exemplary programs (Kearney, 2014).

However, induction by itself is insufficient to retain beginning teachers in the profession
(Smith & Ingersoll, 2004; Taranto, 2011; Ingersoll, 2013). Given inconsistencies with support as
participants move from one school site to another, or as changes occur with the leadership at
school sites, there were gaps in the literature as to how these realities might be handled. While
induction is highly recommended for beginning teachers (Feiman-Nemser, 2012), suggestions
from the findings abound for perceived improvements, such as reduction of paperwork, closer
matches with mentors, and a school climate that embraces the needs of beginning teachers.
**Teacher inquiry as job-embedded professional development.** Inquiry is a powerful means of promoting teacher autonomy that inspires teachers to take initiative and responsibility for their learning outside of conventional professional development (Cochran-Smith & Lytle, 1993; Dana & Yendol-Hoppey, 2009), but it is only one component toward success. Defined by Cochran-Smith and Lytle (1993) as “systemic intentional inquiry by teachers about their own school and classroom work” (p. 23), the literature offered several examples of inquiry projects in both pre-service and in-service phases of teacher development. Smith and Sela (2005) list a number of researchers’ perceived advantages of action research as a bridge to successful professional practice and an essential component of beginning teachers’ professional development. For example, Altrichter (1993) advocates for its ability to improve teaching and learning, while supporting teachers, and giving them voices; Lederman & Niess, 1997; Winter, 1998; Valli, 2000; Tricoglus, 2001; and Goodnough, 2003 advocate for bridging the gap between theory and practice, a gesture that brings teachers into the fold of meaningful research, and adds to the education profession.

Nevertheless, while inquiry promotes teacher autonomy and inspires teachers to take initiative and responsibility for their learning needs outside of conventional professional development (Dana & Yendol-Hoppey, 2009), it is insufficient to retain all beginning teachers that enter the profession (Cochran-Smith & Lytle, 1993; Smith & Sela, 2005; Schoen, 2007). Although teachers feel comfortable with identifying their classroom problems and welcome teacher research opportunities, they are also desirous of engaging in other pedagogical elements that contribute to their professional growth, such as curriculum involvement and student performance data analysis (Ball & Forzani, 2011; Clayton, 2007; Butler & Schnellert, 2012;
Giles & Johnson, 2013). Consequently, inquiry is only one segment of the induction process that must interconnect with other elements for overall success.

**Transitioning to Common Core.** As the literature indicated, research on Common Core is emerging, given its recent adoption by the majority of states (Denski, 2013). Institutions of higher education and K-12 organizations are currently engaged in professional learning for the complex demands that it will take to train pre-service and in-service teachers (Levine, 2014). As Zhang (2014) indicates, beginning teachers’ challenges of implementing the Common Core appear to originate from a confusion of the language and application to content areas. In addition, the literature reports on a scarcity of resources, since formal materials for course work were not readily available (Zhang, 2014; Saylor & Kerhoff, 2014).

Findings in the study aligned with the reports from the literature to the extent that expertise and resources are scarce. However, teacher perspectives on the systemic changes were not clearly acknowledged. Findings indicate that there are strong elements of nonchalance and apathy toward the Common Core standards among the study’s beginning teachers. Its importance and priority appeared to be minimized as the participants attempted to implement them, according to their own lens.

**Summation.** Induction programs do not necessarily take advantage of the rich experiences that beginning teachers bring as adult learners from the outside world to school operations. As a result, teachers tend to be apprehensive about having to complete yet another credentialing requirement in the name of induction, despite the support that it purports to offer. Further, teachers resist being bombarded with excessive accountability measures. Instead, they yearn for a stress free environment in which job-embedded professional development is situational and buttressed by support from mentors and peers.
Assessing the effectiveness of an induction program relies on factors that are inconsistent across the board, making it a complex and challenging endeavor. Induction programs vary by their administration, diversity of school culture, and quality of mentorship. In addition, program success varies from year to year. One cohort of teachers may not reap the same benefits as others in a given year, due to factors such as mentor-mentee and grade level matches, or school site climate.

While inquiry promotes teacher autonomy and inspires teachers to take initiative and responsibility for their learning needs outside of conventional professional development, it is insufficient to retain all beginning teachers that enter the profession (Cochran-Smith & Lytle, 1993; Smith & Sela, 2005; Schoen, 2007). In addition, during the curricular change effort of Common Core Standards, beginning teachers have addressed it with low priority. With little or no guidance from mentors and administrators, they have remained within their comfort zones by doing what they deem is acceptable.

Section 4: Findings for Research Questions

**Overarching research question.** What is the induction experience for beginning teachers during the implementation of Common Core Standards in a California suburban high school district? The participants’ experience was a blend of perceived successful endeavors and inhibitors that impacted their practice. Nevertheless, all participants resolved that the induction experience was necessary for them to grow as education professionals. As mentioned in the problem of practice, a study on a target group of beginning teachers may reveal factors that demonstrate success or inhibit their growth.

**Perceived success factors.** This study has gleaning substantial information on these factors as described below.
Data-gathering for specified, measurable outcomes during inquiry-based projects. All participants affirmed that their inquiry projects yielded substantial data that were useful for improving their pedagogical practices. Student performance data collected in their classrooms from assessment results served as a test of their instructional strategies. The results were unique to their student population and could be readily analyzed with the objective of making modifications for the improvement of future lessons. This practice was perceived as a systematic means to enable differentiation for students’ varying abilities, learning styles and remediation.

Desire to collaborate and network with beginning peers and veteran teachers. All participants expressed the need for opportunities to interact with other beginning teachers and veteran teachers, particularly their mentors. Benefits that accrued from this experience included strengthening of curricular knowledge and corresponding instructional practices as well as classroom observations. The beginning teachers’ desire to engage in these types of activities indicates that beginning teachers seek a move away from isolation. Purportedly, they have grasped that meaningful collaboration with other colleagues is a powerful means of professional growth.

Use of prior knowledge to integrate Common Core paradigm shift. While the shift to Common Core was not considered a dramatic change in the beginning teachers’ induction experience, a number of them utilized their knowledge from teacher preparation programs or content disciplines to enact the implementation in their classrooms. Some felt their disciplines were aligned with the standards and already had direct experience with the substance of the standards; others initiated their own research or adapted prior training in district programs and initiatives to begin the shift. This practice demonstrates that, when adequately prepared in
teacher preparation programs, or in impactful district programs, beginning teachers can transfer knowledge and function competently within a change period even when clear directions are not offered by mentors and supervisors.

**Availability of structure for formative assessment proved practical for foundational learning.** The formative assessment modules for teaching and learning resonated strongly with all participants. Through the Context for Teaching and Learning module, they readily adapted to the contextual environment of school as a workplace for learning. Within the parameters of district and site organization as well as student profiles, legal requirements, logistical practices and community resources, the participants reported success with assimilation into the school culture. This feature of the induction program contributed to their success, since it enhanced their performance of curriculum delivery in more than just a perfunctory manner.

**Experimenting in a safe space.** Given the inquiry focus of the induction program, participants reported that their classrooms felt like a safe space to experiment. A few participants reported that their school had a culture of experimentation, in which it was “okay to fail” as long as they maintained a cycle of continuous improvement. This mindset might be a positive one, in that, it spurs teachers’ desire to take risk without feeling penalized if their actions fail initially. Furthermore, participants indicated that since there was no template for solving challenges in every classroom situation, under shifting circumstances and situational needs, they were often compelled to pull practical solutions from various walks of life. Participants who had entered the profession from other careers reportedly used their knowledge and background experiences about managing people, communicating, and innovating to face challenges within their classrooms. Participants who entered the profession as recent college graduates had the most tedious shifts but still mustered up their best efforts from “common sense.” Participants who had
been student teachers brought knowledge from their practical experiences with master and cooperating teachers to their new instructional environments. These factors imply that beginning teachers do not necessarily perceive themselves as blank slates upon entrance to the teaching profession but are willing to act as their own agents by utilizing their background knowledge and experience for the success of their instructional environments. Notably, their classrooms functioned as a safe space for trial and error.

**Observing growth over time.** Participants noted that success within their current practice was the ultimate payoff for the investment they made in induction. They acknowledged that it was necessary to feel the challenges initially, and, later, celebrate the victories when they eventually discovered how to solve them. With continuous periods of reflection of their cyclical, year-to-year growth, they have catalogued what worked best in their instruction and what failed. These reflective practices, reportedly, are now etched in their professional journey and have become a part of their lifelong learning. Acknowledging that reflection is necessary for competence in the *California Standards for the Teaching Profession*, and moving farther on the *Continuum of Teaching Practice* (California Teacher Induction, 2012), from emerging to exploring to applying to integrating to innovating, the participants verified that the induction process was an essential ingredient to their development.

**Perceived inhibitors.** The following factors were reported as inhibiting the professional growth of beginning teachers:

**Bureaucracy.** Participants lamented about the recordkeeping that was necessary to maintain evidence items for their portfolio. These items included student work, reflective notes, artifacts, and inquiry plans designed to demonstrate levels of professional growth. Many
participants considered this process “busy work” and would have preferred to use that time preparing or assessing lessons.

*Length and mode of induction Meetings.* While afterschool induction meetings had high praise from the participants, comments were made that the meetings should be shorter than the two-hour afterschool period that they were expected to attend. A suggestion was offered to use blended formats, such as some online along with face-to-face gatherings.

*Professional development that does not align with varying developmental needs.* Participants expressed their desire for professional development that matched their specific areas of need. Rather than participate in a session in which topic they felt competent, participants expressed they would have preferred content that was tailored to their unique weaknesses. For example, teachers who felt strong with technology skills did not feel engaged in an introductory session for a tool they were already using.

*Differences in school climate.* Participants reported that although the induction program spanned all the school sites in the district, the support they experienced from one school site to another was not necessarily the same if they were relocated to a different site. Contributing factors included their ranking of site administration’s priority, quality of mentors, support from teacher leaders, and familiarity with classified staff.

*Non-articulation with institutions of higher education.* To adequately support participants who were concurrently enrolled in graduate degree program, requests were made to align induction with university course work. As such, participants sought for improved articulation and collaboration with universities so that inquiry projects during induction and empirical research in their graduated program could be merged into one end-product.
Research sub-question #1. What are the beginning teachers’ perceptions of job-embedded, professional learning? The participants perceived job-embedded professional learning as “learning on the job—in the moment—when there was an aha! period.” Working with the induction program’s framework of the Plan-Teach-Reflect-Apply model, participants interpreted this as a mantra for fixing things at various intervals of the instructional phase: in the moment, at the end of the class period, at the end of the day, week, quarter, semester or year. Success factors from these perceptions as are as follows:

Appreciation for concrete experiences. As the beginning teachers capitalized on training, mentoring, collaboration and inquiry, their concrete learning experiences blossomed. Throughout induction, participants reported many instances of success within their classrooms that spurred job confidence and student achievement. These were described as moments where the teachers successfully grasped the ingredients for specific teaching strategies. These experiences ranged from employing pop culture to improve poetry learning to scaffolding rigorous activities for student comprehension with mini-lessons in foreign language. In their observation of student learning during this stage, participants reported watching the faces of students change from blank stares to full engagement. Similar to the students’ lightbulb moment, the lightbulb also lit up for the participants, leaving them with a sense of accomplishment.

Formative assessment system. Participants expressed their appreciation for the autonomous nature of teacher-inquiry as job-embedded professional development. In particular, the participants found value in the sequence of the formative assessment modules. They perceived that the first two modules, Context for Teaching and Learning and the second module, Assessment of Teaching and Learning, served as building blocks for the third phase, the inquiry module. As mentioned in previous sections of this chapter, the Context for Teaching and
Learning provided the stage for instructional delivery planning, in accordance with students’ backgrounds. Ostensibly, their work in the first module proved to be the foundation on which later successful experiences were built and provided cushioning for the second module.

After having the support to examine context from Module A and the experience of classroom observations from Module B, the participants felt equipped to design projects for the inquiry phase, Module C. Reportedly, their needs were met because they had a strong grasp of their student population, resources, personnel, curriculum, and instructional strategies, and could clearly set measureable goals and objectives to test the outcome of their inquiry-based professional development.

**Value of reflective time.** Participants placed great emphasis on the reflective periods in which they engaged after their day-to-day activities. Beyond the built-in reflective periods that the induction program provided via mentor conversations, online journals, and formative assessment documents, participants noted that reflection was seamlessly integrated in their practice and was necessary for improvement. This metacognitive approach was highly valued and ingrained in their mindset for future growth and development. According to the participants, multiple episodes of reflective experiences enabled them to make sense of their new learning and inspired them to generate continued success in their instructional environments.

**Research sub-question #2.** How are the needs of beginning teachers as experiential learners met (or not met) in the teacher induction program? The induction experience for the beginning teachers in the study was a rich blend of curricular, collaborative and experimental occurrences. Reportedly, as the beginning teachers developed and refined their instructional craft, individual experiences were impacted by support or lack thereof (Darling-Hammond, 2010). Hence, the participants were actively engaged in professional learning that included
traditional types of activities but equally partook of inquiry-based methods within their classroom practice.

**Inquiry.** As the participants questioned the merits of inquiry as professional development, findings indicated dual responses: There were preferences as well as opposition for this methodology. Seven out of ten participants noted unique opportunities to collect and assess data within their classrooms, model inquiry activities for student connections, conducting trial and error methods, and the existence of a safe space to experiment. The remaining three participants posited that with inquiry-based professional development, empirical proof is limited; there is no supervision or facilitation during the work; Internet sources are unreliable; and the perception of low completion rates or follow-through. Nevertheless, all participants’ needs were met as they sought to gather data for improving student performance.

**Collaboration.** All participants expressed enormous satisfaction from collaborating with peers. Advantages to collaboration resulted from cathartic bonding, during which struggles and accomplishments were shared; increased self-confidence from identifying strengths; identifying leadership models within the group; content area support; along with relationship and network building that have remained strong.

**Common Core adaptation.** The participants’ experience with Common Core as a shifting paradigm was a mere subtlety. Some participants did not receive clarity from mentors or administrators and assumed they did not need to be accountable. They observed that many veteran teachers had continued to teach by the original state content standards and followed suit. Other participants barely noticed the intended shift because their teacher preparation program had been sufficient, their discipline was a natural fit with the standards or they had researched the standards on their own and were doing their best to adhere to them.
**Connecting with students.** Within the participants’ instructional context, the induction module, Context for Teaching and Learning proved invaluable. Through this module they learned how to connect students’ backgrounds to curriculum, support differentiation, learn how the logistics of school operation, how to communicate with parents and incorporate community resources.

**Mentor observations.** With reference to the Assessment of Teaching and Learning module, the participants expressed that this module served their needs by narrowing down problem areas from many to a few. By placing their focus on a small number of deficiencies during designated periods of time, they, in conjunction with their support provider, intensely examined and tried potential solutions. The observational process appeared to be of benefit to the participants due to the two dimensional approach that it offered. Most participants reported making modifications for instructional improvements afterwards in areas such as classroom management, seating charts, grouping, and differentiated instruction.

**Previous careers and life experience.** Acknowledging that textbooks and training are not sufficient for classroom practice, the participants reported that experimentation and life experiences came to the fore in attempts to be successful as a teacher. As such, they noted instances of navigation by trial and error, pulling life lessons from previous work experiences, and creative ways of balancing the professional workload. Participants who came from industry brought their own strengths to the classroom and exhibited maturity levels that were different than recent college graduates. These teachers needed differentiated training activities to meet their needs.

**Payoff.** The participants’ consensus on their induction experience was that current practice is the ultimate payoff. Within the content areas of math, science, English language arts,
world languages and special education, participants noted several instances where lessons from induction transferred into their classroom strategies. These experiences proved inspirational and were believed to bolster student success.

Section 5: Implications for Practice, Future Research, and Limitations

Based on the research findings about the participants’ experiences in the district’s induction program, factors emerged that may have implications for practice and future research. These implications are described below within the context of each research question.

Overarching research question. Among the perceived success and inhibiting factors that the participants described in response to the overarching research question, noted in section 4, elements were identified that can be pursued for continued support of their instructional practice and future research. These elements have potential impact for subsequent professional development as well as induction program improvement.

Practice. The following factors have implications for beginning teachers’ successful practice:

Value placed on student data analysis. Participants expressed satisfaction with the process of data-gathering to assess measurable outcomes from their teacher-created assessments (Dana & Yendol-Hoppey, 2009). Although they had not received formal training in analyzing assessments, they expressed that they acquired considerable advantages when they made meaning of the data that resulted from their inquiry projects (Ross & Bruce, 2012). Given the contemporary appeal to plan and differentiate instruction based on the results from data analysis, it is essential that teachers are skilled in this field (Reeves, 2010). To enhance practice, further professional development in data analysis via curriculum rubrics and assessment metrics is warranted for these teachers as they advance in their careers.
Participation in integrated curriculum teams. Participants cited strengthening of curricular knowledge as one of the benefits of collaboration with peers and veteran teachers toward their success. Participants who had voluntarily enrolled in the district’s integrated curriculum teams found the experience meaningful to their content area and cross-curricular content areas (Clayton, 2007; Butler & Schnellert, 2012; Giles & Johnson, 2013). Given the opportunities to collaborate with teachers at all experience levels, they quickly discovered and acclimated to instructional strategies that yielded success in the classroom. In fact, lesson planning during the curriculum teams’ unit design was often used to augment their inquiry projects. The practice of engaging beginning teachers in integrated curriculum teams needs to be further developed and facilitated in light of the era of shifting paradigms (Reeves, 2007).

Providing context for teaching and learning. Given that the participants expressed tremendous praise for tools that they used to learn about students’ backgrounds and cultural connections, it may be worthwhile to build on this mechanism for practice. One of the biggest challenges in today’s schools is lack of student engagement (Darling-Hammond, 2010). Students often drop out because they do not feel connected with teachers of different class, culture, and socio-economic status (Darling-Hammond, 2010). Pursuing additional professional development for practice that will build on the foundation that the beginning teachers experienced in the induction program could be a fruitful investment for improving student engagement.

Future research. The following are recommendations for future research:

Bridge phase for non-eligible induction candidates. Throughout the study, former emergency permit holders and interns asserted that they would have been better served if their assimilation into the teaching profession had begun with formal induction. This was in reference to the gap phase during which teachers had to wait for a new cycle of induction enrollment if
they earned their preliminary credential months after the school year had begun. By district personnel tradition, teachers who had not earned their preliminary credentials were not formally eligible for induction. This proved to be an inhibitor to the induction experience.

Teachers who were in this situation persevered through challenges without a mentor, feeling frustrated and unsupported throughout this turbulent period. However, once they eventually began the induction program and came to terms with its structure and procedures, they surmised that they reaped significant benefits for professional growth. Further research is necessary to identify the specific needs of teachers who enter the education profession through alternative means without any pre-service practicums or experience. It is apparent that the professional development needs of these teachers need to be addressed through the design of a bridge phase to induction. Furthermore, stronger alliances and collaboration between induction programs and institutions of higher education should be explored to accommodate their needs.

**Do people entering the teaching profession from other careers need specific types of training to develop talents that they bring to education?** As noted in chapters 3 and 4, five beginning teachers in this study that came from a previous career brought skills and talents that enabled a modicum of confidence in their experimentation with instructional strategies. Given their success with these strategies, further research is warranted for beginning teachers who enter the profession from a previous career. While they tend to bring more maturity and fortitude toward the challenges that surface, it may be necessary to further determine the type of professional development best suited for them toward the goal of differentiated professional learning.

**Elimination of bureaucracy.** Since some participants identified recordkeeping of induction paperwork as burdensome and, in some instances, an obstacle to time for lesson
planning and assessment activities, there may be a need to consider minimizing the bureaucratic elements involved in the induction process. Further research is necessary to analyze the cost benefit of requiring records that are necessary to capture individual progress for program data versus allowing maximum time for beginning teachers to pursue curricular activities.

**Research sub-question #1.** The participants’ perceptions of job-embedded professional development were based on concrete experiences, formative assessment, and reflection. Similar to findings from the overarching research questions, elements were identified that had implications for practice and research.

**Practice.** The following factors have implications for beginning teachers’ successful practice:

**Concrete experiences.** As established in the critique of Kolb’s (1984) theoretical framework, one participant’s level of concreteness in practice may differ from another (Bergsteiner et al., 2010), yet the learning from the experience may yield similar levels of satisfaction relative to the intended classroom objective. Participants expressed their perceptions of job-embedded professional development as successful trial and error methods, and experimentation within various segments of the curriculum aimed at student achievement. School leaders and district professional development coordinators should encourage beginning teachers to share these concrete learning experiences with the larger school community, bearing the intent of identifying a diversity of practices that may impact student achievement.

**Formative assessment.** The formative assessment system in which the beginning teachers participated provided a structured system to assess their professional development. When the induction period ended, the teachers lacked a similar system to replace it that would systematically capture growth over time. Besides their formal teacher evaluation, there is no
assessments of their competence, particularly from a non-judgmental stance. Therefore, there is a need to improve practice by providing additional systematic coaching for teachers beyond the traditional two-year induction program until they gradually arrive at acclimation to competent classroom practices.

**Reflection.** Participants felt strongly that the reflective time periods that they experienced during induction catapulted metacognition for continued professional growth. They attributed this to the program’s built-in reflective conversations with mentors and journaling during inquiry projects and at the end of professional development activities. Given the perceived advantages of reflective time, staff developers should ensure that reflective activities are embedded in future professional learning activities to nurture participants’ metacognition.

**Future Research.** The following are recommendations for future research:

**Coaching after induction.** While beginning teachers gain considerable benefits during the induction phase, there may still be gaps in their development after they exit. Further research is warranted on post-induction needs and how these teachers can be coached without the intense support they became accustomed to during induction. To end mentoring relationships and not replace them with similar support could have negative effects that might stagnate the growth of a beginning teacher. School leaders should ensure that these teachers continue to have systematic forms of support as they advance in the early years of professional practice. Research on finding a balance between professional support for their developmental stage (Drago-Severson, 2009) and independence is worthy of pursuit.

**Research sub-question #2.** The majority of participants reported that their needs as experiential learners were primarily met from the inquiry process, collaboration, and mentorship, but that
their needs were not necessarily met in their adaptation to Common Core. These indicators have relevance for practice and future research.

**Practice.** The following factors have implications for beginning teachers’ successful practice:

*Inquiry.* Given the positive overwhelming response to inquiry as a means of job-embedded professional development, it is clear that beginning teachers may have some commitment to pursue inquiry as an independent pathway for continued growth. Nevertheless, there is some resistance to this method, and it may be prudent for school leaders to determine supportive mechanisms for teachers who could benefit from this process by embedding action research projects in practice. Hence, a culture of inquiry at all levels of education, beginning with institutions of higher education, district leaders, site administration, and teachers and continuing to K-12 students should be a characteristic feature for teaching and learning (Dana, Thomas & Boynton, 2011).

Since there was some apprehension toward inquiry for a few members of the study, it was noted that a percentage of beginning teachers may not readily acclimate to classroom research as a form of inquiry and that school leaders need to promote the benefits of this practice as investigative, solutions-oriented, and a pathway to channel intellectual curiosity (Reagan, Case & Brubacher, 2000). Often the apprehension originates from fear of giving up control. Dana et al., 2011 posit that “Many teachers believe the only way to ensure that students are prepared for high stakes tests is to drill and practice for those tests” (p. 96). A few participants in the study feared getting things wrong, wasting time on what not night prove to be worthwhile, and the need for guidance from a higher authority. Consequently, school and district leaders, as well as institutions of higher education, need to facilitate and model action research for the teachers that
they serve, given the ultimate goal to instill inquiry-based and reflective competences in their work with students.

In light of the benefits of adult learning, differentiation, relevance, self-direction, data collection, and collaborative reflection, a common thread of inquiry in an organizational climate can have sustainable results for professional learning and student achievement, according to Dana et al., 2011. In the era of Common Core, where rote memorization is diminished (Giles et al., 2013), students need teachers who will urge them to investigate, create, collaborate, communicate, and reflect (Dana et al., 2011). It is, therefore, incumbent on beginning teachers as well as others throughout the organizational hierarchy, to develop an appreciation for inquiry that begins with the individual but later assumes a collaborative stance (Drago-Severson, 2009).

**Collaboration.** As participants bonded with peers and shared successes and challenges, an informal learning community that fostered networking was created. This phenomenon indicates that beginning teachers need time and space as a unique group to socialize without the formality of supervision. Professional development leaders should consider providing opportunities for these events to occur, thus providing a forum for beginning teachers to share and generate ideas to solve typical struggles during their interactions.

**Mentorship.** Since great praise was attributed to the mentors’ dedication and support of the participants, it is implicit that these relationships were vital for success and have potential for sustained benefit in practice. Participants considered classroom observations by their support providers as having a “third eye” in the room. They applauded the opportunity to have mentors document elements within their teaching practice that they frequently overlooked or took for granted.
Adaptation to Common Core. One of the purposes of this study was to identify the experiences of a target group of beginning teachers as they were entering the profession that was on the brink of the curricular shift to Common Core standards. The findings from this study indicated that teachers only perceived a subtle shift. Some contended that they already possessed the skills and knowledge from the disciplines they studied as undergraduates, for example, the science and English teachers. For others, previous professional development and district initiatives provided the perceived skills that were necessary. For the remainder of participants, there was no accountability to site administrators or the district, so they either reverted to the old standards or revved up critical thinking strategies in classroom instruction. This implies that, in practice, school leaders should be more attuned to the needs of beginning period during a change period or initiative implementation.

Future Research. The following factors have implications for future research:

What might be the impact of collaborative inquiry between beginning teachers and their mentors? Given the benefits of inquiry and classroom observations by mentors, it may be worthwhile to explore inquiry projects between beginning teachers and their mentors. There are considerable benefits that could be derived from working with a teaching partner who could offer some experience and insight (Bullough, 2005). In light of these factors, further research is warranted on mentor-mentee learning relationships during the induction process. The relationship may well be a symbiotic one in which they glean knowledge from each other, relative to instructional strategies and assessment methods. The specific parameters and measurements for these outcomes require deeper investigation.

Does curricular systemic change have an impact on teacher development? Perhaps it is still too early to identify the impact of Common Core implementation on beginning teachers’
instructional practices, since institutions are in the early phases. Hence, further research needs to be conducted to ascertain the impact that has occurred over time. Similarly, there is room to research beginning teachers’ adaptation to their work environment during a curricular shift. In this study, some participants adapted readily, whereas others were apathetic. As the instructional environment becomes more complex, it might be worthwhile to continue the research on curricular paradigmatic shifts as they relate to teacher development and differentiate training according to teachers’ specific needs.

Limitations

Given the small sample size of the beginning teacher participants and the boundedness of a school district, single-case study research, limitations exist that prevent generalizations or conclusiveness to the findings discussed. While the researcher purposively selected a targeted group, individuals who opted to participate in the study originated from unspecified school sites within the school district. Similarly, while a cross-section of content areas was represented, some content areas were lacking. Social science, art, physical education, and music, for example, were not represented among the content areas although the induction target group had former beginning teachers who taught those subjects.

In addition, the beginning teachers represented high school teachers’ perspectives only, whose experiences fell in the realm of the secondary level and did not include elementary education; elementary and middle school teachers may have different induction experiences. Furthermore, since the study focused on the experiences and perceptions of the beginning teachers, neither their mentors nor supervising administrators were interviewed for additional input, thus narrowing the scope of the study. Moreover, the parameters of the study were bounded in a school district induction program; other California induction programs that are
sponsored by consortia, county offices of education or institutions of higher education may yield different results about the induction experiences of their beginning teachers.

**Recommendations for Program Improvement**

As described earlier in this section, transitional success from pre-service to in-service practice was impacted by the credentialing status in which beginning teachers were hired. Teachers who were not yet eligible for induction had gaps in their support. Therefore, the induction program might consider designing an induction bridge phase that would support them while they are waiting to enter the formal induction stage. A bridge phase would serve as a cushioning mechanism and provide mentoring services that could potentially allay the discomfort and struggles that the teachers faced during this transition period (Feiman-Nemser, 2012).

Moreover, as a result of the beginning teachers’ perceived success in the integrated curriculum teams, the induction program might consider incorporating participation in the district’s integrated curriculum team as part of the inquiry projects they currently implement. Operating in a district curriculum team could serve as one means to deliver their instructional units and lessons as they work in collaboration with other teachers (Beiler, 2012; Ahn, 2014; Clayton, 2007).

Furthermore, in the interest of expanding the beginning teachers’ knowledge and expertise in data analysis, the induction program might consider providing a series of professional development activities on using rubrics, systematic data assessments, and determining evidence-based practices for classroom use (Drago-Severson; 2011). These trainings would provide the tools for inquiry and continued experimentation in instructional practice.
**Personal Reflections**

I set forth on this research journey with a desire to explore factors that positively contribute to professional learning and generate teacher efficacy. In doing so, I found a practical research audience among former beginning teachers with whom I had worked as their induction coordinator. Having facilitated their end-of-year colloquiums and led their induction exit interviews, I was cautiously optimistic about what the research findings would be as I recalled the stress that they encountered to prepare their evidence binders for assessment and face a panel of district staff. I could always feel the sigh of relief they exhaled at the end of the process when their recommendation for the clear credential was uttered.

Hence, I was delighted to have a second opportunity to sit with former participants—this time under their terms, and by their choice—to discuss their experiences without the cloud of “supervision” hanging over our heads. I found the interview experiences to be open, honest, and cordial. I was pleased by how much more confident they had become in discussing their instructional practices, and although no one claimed perfection by any means, they were proud to reveal accolades that had been bestowed on them and cite leadership positions they had assumed. Even more important was the commitment they had for student success—the ultimate goal for teacher efficacy.

Despite the perceived obstacles, all participants were grateful for the induction experience and highly recommended it as a mandatory prerequisite for pre-service transition to professional practice and recommendation for a clear teaching credential. Although they initially perceived induction as “one more hoop to jump through,” they expressed emerging as stronger teachers at the end of the journey.
In what could be considered a timely occurrence, the California Commission on Teacher Credentialing adopted new induction standards for beginning teachers in December 2015. These standards have eliminated the burden of evidence compilation to a focus on customized learning for individual needs and intensive mentoring services. As the induction program is revised under the parameters of these current standards, I have the privilege of modifying the changes, with the results of this study as a backdrop. I am confident that future generations of beginning teachers will continue to grow professionally from a revised program that bolsters and nurtures the inquiry practices that the induction program offers.
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Beginning Teacher Research Study Interest Form

Your first and last name *

Your personal email address *
(This should be different from your district email address)

Cell phone #
(Optional)

I will consent to participate in the beginning teacher research study by completing and signing the Informed Consent document at the first interview meeting.*

☐ Yes
☐ No

Next Steps
If you answered yes above, I will contact you through your private email address to arrange for an interview meeting at a private location of your choice.

Submit
Dear Teacher:

As a former participating teacher in the Antelope Valley Union High School District induction program you are a valuable resource for projects that seek to research the impact of professional learning on beginning teachers. Further, since your induction period overlapped with the implementation of Common Core Standards, you can offer considerable insight into beginning teachers’ experiences with systemic change during their entrance into the education community.

I have had the remarkable privilege of working with you as induction coordinator during your transition from university course work to professional practice. As such, the relationship I have developed with you is invaluable, and I now seek to tap into your experiential learning as a potential participant in my doctoral research. Since I am embedded in the induction program as its leader, my role is considered participant-observer.

The purpose of this research is to gain insight into the impact of a beginning teacher induction program during Common Core implementation in a suburban high school district. By engaging in a qualitative investigation of a target group of California beginning teachers’ reflective experiences through inquiry-based, job-embedded professional learning activities, the education community may identify factors that generate success as teachers advance deeper into professional practice, while adapting to shifting paradigms. Equally beneficial will be a discovery of the obstacles and inhibitors that may be addressed to enhance administrative support of beginning teachers.

If you elect to participate in the study, your contribution will be held in the strictest confidence, and you will not be personally named in the findings. You can withdraw from the study at any time without any repercussions or consequences. There are no foreseen risks to your involvement.

To secure your privacy, I will be conducting further communications with you through your personal rather than district email. In addition, I will hold two individual interviews that will last no longer than an hour in a private location of your choice away from district property. With your permission, inquiry projects’ documentation, artifacts and classroom observation records as documented by your support provider will also be reviewed to substantiate the research.

Please complete the interest form at this link http://goo.gl/forms/envHPon8lC if you would like to participate in the study. The first ten individuals to respond affirmatively will be selected and contacted with more details. To compensate participants who complete the study for their time and efforts, a $15 dollar Amazon gift card is being offered.

Thank you!

Sincerely,

Loy Dakwa
AVUHSD Induction and Professional Development Coordinator
Northeastern University Doctoral Student
Appendix C

Palmdale, CA 93551
August 6, 2015

Dr. David Vierra
Antelope Valley Union High School District
44811 N. Sierra Highway
Lancaster, CA 93535

Dear Dr. Vierra:

As a doctoral student at Northeastern University in Boston, Massachusetts, I am in the preparation phases of conducting research on professional learning in the era of shifting paradigms, with emphasis on Common Core standards. The purpose of this research—a case study—is to gain insight into the impact of a beginning teacher induction program during Common Core implementation in a suburban high school district.

By engaging in a qualitative investigation of a target group of California beginning teachers’ reflective experiences through inquiry-based, job-embedded professional learning activities, our school district and the education community may identify factors that generate success as these teachers advance deeper into professional practice, while adapting to shifting paradigms. Equally beneficial will be a discovery of the obstacles and inhibitors that may be addressed to enhance administrative support of beginning teachers.

Therefore, I hereby seek permission to conduct my research with former beginning teachers who completed induction between 2013 and the present year in the Antelope Valley Union High School District. Obtaining permission via your signature in the paragraph below is the first of several requirements for the protection of human subjects, as administered by Northeastern University’s Institutional Review Board.

Thank you in advance for your time and efforts.

Sincerely,

Loi Dakwa
Northeastern University Doctoral Student

Permission to conduct the above mentioned study is hereby granted by David J. Vierra, Ph.D., Superintendent of the Antelope Valley Union High School District. I am aware that this consent is being submitted to the Northeastern University Institutional Review Board, and that questions or concerns can be directed to the principal investigator/advisor, Dr. Corliss Thompson Brown, co.brown@neu.edu or Kate Skophammer, IRB Coordinator for College of Professional Studies at Northeastern University, 617.390.3450; k.skophammer@neu.edu.

Signature: [Signature]
Date: [8-10-2015]
Appendix D

Inquiry Observation Record (C-6) Part 1

DIRECTIONS: Support providers gather evidence related to the focus question, selected CSTP, content standard(s), and embedded induction Program Standard(s).

<table>
<thead>
<tr>
<th>Participating Teacher:</th>
<th>Date:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Support Provider:</td>
<td>Common Core or Content Standard(s):</td>
</tr>
</tbody>
</table>

Focus Question(s):

What evidence could your support provider collect in relation to your focus question?

<table>
<thead>
<tr>
<th>Induction Program Standard(s) Focus:</th>
<th>Time Observation Begins:</th>
<th>Time Observation Ends:</th>
</tr>
</thead>
</table>

Observation Data:

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21st Century Learning

(Consider the following for post-observation discussion with the participating teacher)

- Communication
- Creativity
- Collaboration
- Critical Thinking

The Induction Program Standards (Pedagogy, Universal Access: Equity for All Students, Universal Access: Teaching English Learners, and Universal Access: Teaching Special Populations) are embedded with observations of the California Standards for the Teaching Profession (CSTP).
**Inquiry Observation Record (C-6) Part 2**

**DIRECTIONS:** Support providers gather information related to focus student participation, behavior, and differentiation of instruction.

<table>
<thead>
<tr>
<th>Focus Student 1 - English Learner</th>
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<tr>
<td>Student participation:</td>
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<td>Behavior:</td>
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<td>Differentiation:</td>
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<td>Behavior:</td>
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<td>Differentiation:</td>
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<th>Focus Student 3 - Choice</th>
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<tr>
<td>Student participation:</td>
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<td>Behavior:</td>
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<td>Differentiation:</td>
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Appendix E

Signed Informed Consent Document

Northeastern University, Department: Graduate School of Education
Name of Investigator(s): Principal Investigator: Dr. Corliss Brown Thompson
Student Researcher: Loy Dakwa
Title of Project: Beginning Teachers’ Professional Learning as Experiential Learners: A Case Study of Inquiry-Based Practices in a California Teacher Induction Program

Informed Consent to Participate in a Research Study
We are inviting you to take part in a research study. This form will tell you about the study, but the researcher will explain it to you first. You may ask this person any questions that you have. When you are ready to make a decision, you may tell the researcher if you want to participate or not. You do not have to participate if you do not want to. If you decide to participate, the researcher will ask you to sign this statement and will give you a copy to keep.

Why am I being asked to take part in this research study?
We are asking you to be in this study because you are a former beginning teacher who completed induction between 2013 and the present year.

Why is this research study being done?
The purpose of this research is to have an understanding of beginning teachers’ professional learning experiences during the change to Common Core.

What will I be asked to do?
If you decide to take part in this study, we will ask you to participate in the following activities:
• Two face-to-face interviews (a primary interview at the beginning of the study and a follow-up interview at the end of the study) not to exceed one hour each;
• Enabling access to your de-identified induction inquiry documents and artifacts; and
• Allowing access to your de-identified mentor-recorded classroom observation notes during your inquiry projects

Where will this take place and how much of my time will it take?
You will be interviewed at a time and place that is convenient for you. The primary interview will take about one hour and will be audio-recorded. I will then request from you inquiry documentation and artifacts that are relevant to the content of your interview. Finally, after all that data have been collected and analyzed, I will schedule the second interview to check transcripts for accuracy, ask follow-up questions, give you an opportunity to clarify the content and offer additional input, if necessary. The second interview will last about 45 minutes to an hour at a private location and time convenient to you.

Will there be any risk or discomfort to me?
There are no foreseeable risks, harms, discomforts or inconvenience that will pose a threat to you. I will take all precautions to ensure your confidentiality and the security of information you share with me at all times.
Will I benefit by being in this research?
There will be no direct benefit to you for taking part in the study. However, the information learned from this study may assist education administrators in the preparation and design of professional learning for beginning teachers and the education community in general.

Who will see the information about me?
Your part in this study will be strictly confidential. Only the researcher on this study will see the information about you. No reports or publications will use information that can identify you in any way or any individual as being of this project.

To protect your privacy, a pseudonym will be assigned to you and no specific information that could identify you will be published. Both electronic and hard copy materials will be secured on a password protected system at all times. All hard copy and audiotaped materials will be destroyed at the completion of the study.

If I do not want to take part in the study, what choices do I have?
Participation is voluntary.

What will happen if I suffer any harm from this research?
Given that the researcher has no supervisory role over your job performance, there is no harm that you will suffer as a result of participating in this research. All information you provide will only be considered for the context and scope of the research and will be held in the strictest confidence.

Can I stop my participation in this study?
Your participation in this research is completely voluntary. You do not have to participate if you do not want to and you can refuse to answer any question. Even if you begin the study, you may quit at any time. If you do not participate or if you decide to quit, you will not lose any rights, benefits, or services that you would otherwise have as a former beginning teacher in the induction program or as an employee in the district.

Who can I contact if I have questions or problems?
If you have any questions about this study, please feel free to contact Loy Dakwa at dakwa.l@husky.neu.edu. You can also contact Dr. Corliss Thompson Brown, the Principal Investigator from Northeastern University, at co.brown@neu.edu.

Who can I contact about my rights as a participant?
If you have any questions about your rights in this research, you may contact Nan C. Regina, Director, Human Subject Research Protection, 490 Renaissance Park, Northeastern University, Boston, MA 02115. Tel: 617.373.4588, Email: n.regina@neu.edu. You may call anonymously if you wish.

Will I be paid for my participation?
In consideration of your time and efforts, you will be given a $15 Amazon gift card at the conclusion of the second interview. Only participants who complete the study will receive a gift card.

Will it cost me anything to participate?
You will not incur any cost to participate.

Is there anything else I need to know?
The researcher is the induction and professional development coordinator for the school district.
I agree to take part in this research.

<table>
<thead>
<tr>
<th>Signature of person agreeing to take part</th>
<th>Date</th>
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<td>Printed name of person above</td>
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<tr>
<th>Signature of person who explained the study to the participant above and obtained consent</th>
<th>Date</th>
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<tbody>
<tr>
<td>Printed name of person above</td>
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Appendix F

NOTIFICATION OF IRB ACTION

Date:  September 22, 2015  
IRB #:  CPS15-08-16

Principal Investigator(s):  Corliss Brown Thompson  
Loy Dakwa

Department:  Doctor of Education Program  
College of Professional Studies

Address:  20 Belvidere  
Northeastern University

Title of Project:  Beginning Teachers’ Professional Learning as Experiential Learners: A Case Study of Inquiry-Based Practices in a California Teacher Induction Program

Participating Sites:  Antelope Valley Union High School District approval in file

DHHS Review Category:  Expedited #6, #7

Informed Consents:  One (1) signed consent form

Monitoring Interval:  12 months

APPROVAL EXPIRATION DATE:  SEPTEMBER 21 2016

Investigator’s Responsibilities:

1. The informed consent form bearing the IRB approval stamp must be used when recruiting participants into the study.
2. The investigator must notify IRB immediately of unexpected adverse reactions, or new information that may alter our perception of the benefit-risk ratio.
3. Study procedures and files are subject to audit any time.
4. Any modifications of the protocol or the informed consent as the study progresses must be reviewed and approved by this committee prior to being instituted.
5. Continuing Review Approval for the proposal should be requested at least one month prior to the expiration date above.
6. This approval applies to the protection of human subjects only. It does not apply to any other university approvals that may be necessary.

C. Randall Colvin, Ph.D., Chair
Northeastern University Institutional Review Board

Human Subject Research Protection

Human Subject Research Protection
490 Renaissance Park
360 Huntington Avenue
Boston, MA 02115
617.373.7579
fax 617.373.4598
northeastern.edu/hrp
Appendix G

Interview Protocol #1

Interviewee: Participant name (pseudonym) __________________________
Interviewer: Loy Dakwa
Date: ___________________
Subject area ___________________
Former Intern:
_____Yes (completed teacher prep program during in-service)
_____No (completed teacher prep program prior to in-service)
Year exited induction program ________
Years of teaching—current year included ________

Interview #1
Build rapport, describe study, review and sign IRB protocol, reiterate participants’ voluntary role in the study and withdrawal rights, permission to tape record.
You were selected to participate in this study because you were in enrolled in the district’s induction program during the implementation of Common ore standards. The aim of the study is to explore your experiences with professional learning as you engaged in inquiry-based, experiential projects in the induction program while you were going through the curriculum shift of Common Core. Your contributions to the study are significant because the district and education community will understand how your professional learning was impacted during your time as a beginning teacher.

In an effort to accurately capture your responses to my interview questions, I respectfully request your permission to tape record our conversation. In addition, I will be writing notes to highlight and organize what you will say. The tapes will be transcribed by a professional transcription company with which I have a confidentiality agreement. Any reference of identification will be done through a pseudonym. Therefore, no one will be able to identify you as the source of the transcription. I will be the only one with access to the information, and any information that is published will be presented in a manner that you will not be identified as the reference.

I will now give you an opportunity to review the IRB consent form that you have previously signed and when you are finished, please reiterate your consent to participate and grant me permission to tape record the conversation, if you so desire.

[Upon receiving consent]. Before we begin do you have any questions or concern? [Respond to any questions]

[Hearing none, move on to interview questions] I will now begin the interview, which will last for about an hour.

Overview
1. What is your overall impression of induction?
2. How do you feel about professional learning in general?

Part I--Induction experience for beginning teachers during the implementation of Common Core State Standards
1. Reflect on the induction phase of your career. As a beginning teacher, back then, how did you transition from teacher preparation to professional practice? This may include district and site workshops, mentor meetings, department meetings, book studies and individual projects
2. As one who entered the profession, during the paradigm shift from state content standards to Common Core standards, to what extent were you able to implement them, if at all, in your classroom during the induction phase?
3. How did you manage professional learning requirements for induction and implementation of Common Core simultaneously? What artifacts do you have to illustrate your experience?
4. Who or what enabled your transition to Common Core Standards in your instructional practice?
5. Along with your support provider, who or what do you perceive was the source of support as you reflect on your induction experiences?

Part II--Beginning teachers’ perceptions of job-embedded professional learning
1. How did the Formative Assessment System for California Teachers (FACT) impact your ability to plan, teach, reflect and apply on the job? Consider each one separately.
   a) Context for Teaching and Learning?
   b) Assessment of Teaching and Learning?
   c) Inquiry into Teaching and Learning?
2. What do you think about having the autonomy to design your own job-embedded professional learning during your inquiry projects?
3. What are the drawbacks to job-embedded professional learning?
4. What do you think about follow-up and support subsequent to professional learning activities? Are these necessary if professional learning is job-embedded?

Part III-- Needs of beginning teachers as experiential learners met (or not met) in the induction program
1. Having engaged in inquiry projects as a beginning teacher, what lessons did you experience about how teachers learn during the initial, middle and final stages of your project?
2. Describe at least one concrete experience in which you activated your own professional learning in an authentic classroom situation. These experiences are often described as “aha” moments.
3. As you reflected on your new learning experiences via your inquiry projects or otherwise, did you feel motivated to push for further professional advancement as a teacher?
4. Based on your experiential learning during the induction program, what lessons from that experience can be modeled for students as you implement the Common Core State Standards?

**Additional Comments**

We have come to the end of the interview, do you have anything else you would like to add that would contribute to learning about the induction experience of the beginning teacher?

[Thank you for your time, and I will contact you again as soon as the transcription is ready for your review.]

**Interview Protocol #2**

[Thank you once again for participating in the study. This time I will provide you with the transcript or summary of your interview, so you can review it for accuracy. When you are finished, I have some follow-up questions that will help me clarify the information you provided in the first interview and refine the data I have gathered so far.]

**Member-Checking**

We will begin with your interview responses first:

1. Please review your transcript (or summary). Do you agree that the information as recorded is accurate?
2. If yes, move to next question. If no, what would you like to change?
3. What did you mean by ___________ (ask about any items that were deemed vague).

Two schools of thought have emerged about teacher inquiry from the interviews:

1. The dominant theme is that it is beneficial for beginning teachers to have at least partial experience with this model throughout the course of their career—identifying problems and experimenting with solutions keeps them fresh and active.
2. Beginning teachers need guidance from those who are more experienced and have depth in their content knowledge. Experienced teachers can show empirical proof that their practices work because they used the school curriculum exclusively with guidance from a supervisor. Hence, inquiry-based PD should be minimized.

Why do you think the first model had dominance over the second with most participants of the study?

**The California induction system is based on a formative assessment model: Plan, Teach, Reflect, Apply.** Can you say that you engaged in this cycle as a routine practice during induction and beyond?

If so, what was your:

- Concrete experience
- Reflective observation
- Abstract conceptualization
• Active experimentation

Current literature speaks about preparing teachers for a complex society where students are ready for college and career. Do you feel that you are being prepared for current and future generations of students to live in such a society?

The literature also speaks about effective induction as one means of retaining teachers in the profession. Please state if any element from induction has an impact on whether or not you are likely remain in the profession?

[Thank you once again for participating in this study on beginning teachers.]