EXPLORING FACULTY MEMBERS’ PERSPECTIVES ON THE USE OF EMBEDDED ENGLISH COURSES TO ENHANCE WRITING SKILLS OF COMMUNITY COLLEGE STUDENTS

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Abstract

This research study examined the lived experiences of two faculty members who facilitated embedded-level English courses at Middlesex Community College (MxCC), a two-year public institution in the Connecticut State College & University (CSCU) system. The following central question guided this research study: To what extent, as perceived by teaching faculty, does the embedded course resolve community college students’ skill-deficiencies in writing? An interpretative phenomenological analysis (IPA) of research participants’ personal involvements with embedded courses generated five superordinate themes: 1) statewide college readiness levels; 2) engaged time-on-task, 3) personalized learning support; 4) instructional practices, and 5) minor challenges and concerns. Overall, participants in this research study perceived that the embedded-level model is an effective strategy for strengthening students’ understanding of English grammar and basic writing. However, the interviewees’ responses imply that the embedded English courses are not geared for all underprepared students, particularly those who enter community college with measurable 5th and 6th grade reading/writing levels. These findings are relevant to the expanding body of research literature intended to inform community college faculty, as well as administrators and deans, about best practices in teaching embedded/ALP courses. This investigation concludes with implications for practice, limitations of the findings, and recommendations for future research.

Keywords: accelerated learning program, community college, developmental writing, embedded courses, faculty perceptions
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Chapter 1: Introduction

The initial delivery of embedded-level courses at MxCC resulted from a Connecticut act of legislation in 2012, which mandated the reform of developmental education offered at Connecticut’s public community colleges (Public Act 12-40, 2012). The embedded course is a reformed remedial strategy that has been characterized as “…college-level instruction with embedded developmental support designed for students with 12th grade skills (or close to that) who are approaching college readiness but require some remediation…” (Brakniecki, Fitzgerald, & Pritchard, 2013; Connecticut State Senate, 2012; ConnSCU Initiatives, 2012). The embedded English course replaces non-credit developmental writing sequences, which delayed student progression toward satisfying general education requirements. The main purpose of the embedded course is to delivery literacy skills and college-level English in one course, offering students an accelerated way to meet requirements and earn credits toward graduation. (CCCSE, 2016; ConnSCU Initiatives, 2012).

The need for academic remediation is wide-spread among underprepared community college students, and new interventions are needed to help minimize this deficiency (Barbatis, 2010; Bautsch, 2011; Bettinger, Boatman, Long 2013; Craig, & Ward, 2008; Fike & Fike, 2012; Gunn, Hearne, & Sibthorpe, 2011; Jaggars, Hodara, & Stacey, 2013; Rath, Rock, & Laferriere, 2013; Wilson, Davis, Dondlinger, Li, & Warren 2010). Increasingly, new forms of developmental support have emerged at public community colleges where unprepared students are most likely to get remedial support, along with mainstream courses. In the United States, community colleges are mandated to accept a wide-range of incoming students who are not academically ready to succeed in college-level courses (Brock, 2010; Jaggars & Hodara, 2011; Shulock, & Koester, 2014; Wathington, Barnett, Weissman, Teres, Pretlow, & Nakanishi, 2011).
The embedded format provides greater opportunities for underprepared students to receive academic support based upon their needs, and, eventually, to gain a better chance of earning a graduate credential (Bailey, Jaggars, & Scott-Clayton, 2013; Bettinger, Boatman, & Long, 2013). However, the expenditures required for delivering remedial support and academic preparation on the community college-level are costly.

In the U.S., over two billion dollars are spent annually on postsecondary remediation for students of diverse backgrounds who lack college-level competencies in mathematics and English (Bahr, 2012; Hagedorn & Pi, Lu Yan, 2016; Scott-Clayton, & Rodriguez, 2015). Despite these expenditures, the lack of academic preparation among unprepared students continues to be an ongoing problem at most U.S. community colleges. In modern community colleges, incoming students consist of a wide-range of students who need academic remediation, including recent high school graduates, GED recipients, disadvantaged racial-minorities, recent veterans, displaced workers over the age of 25, and foreign-born, non-native English speakers (Barbatis, 2010; Bautsch, 2011; Cari, 2011; Handel, 2013; Kenner & Weinerman, 2011; Wathington, 2011). Research shows that most of these community college enrollees, especially recent high school graduates, need a high level of academic support that provides consolidation of remedial coursework and other instructional activities to successfully complete postsecondary course requirements (Brock, 2010; Handelsman, Briggs, Sullivan, & Towler, Jaggars, 2011; Topper, 2011). Moreover, research reveals that only one-third of recent high school graduates are academically ready for college-level instruction (Jaggars, 2011). Typically, recent high school graduates, with measurable academic needs, are at-risk of failing college-level courses and dropping-out of college without earning graduate credentials (Carnival, & Rose, 2011; Handel, 2013; Edgecombe et al., 2014; Jaggars, & Stacey, 2014; Rath, Rock, & Laferriere,
To address this problem, some community colleges are using embedded courses, or the accelerated learning program, that combine the fundamentals of developmental writing and standard English 101 composition to increase academic success for underprepared students (Jenkins, Speroni, Belfield, Jaggars, & Edgecombe, 2010).

**Purpose Statement**

The purpose of this research study was to gain a better understanding of how community college instructors perceived the embedded-level course and its effect on writing skills of underprepared college students. This research study gathered instructors’ perceptions and involvements with embedded curriculum, including instructional practices, advances in students’ writing proficiencies, and overall quality of the embedded course.

**Statement of the Problem**

There is a need to improve the quality of practice in the delivery of remediation to newly enrolled community college students (State of Connecticut Public Act 12-40, 2012; Brakoniecki, Fitzgerald, Pritchard, 2013). Community colleges in the United States are inundated with an influx of underprepared students who require some form of corrective academic instruction to gain acceptable proficiencies in English writing and to complete college-level courses (Relles & Tierney, 2013; Connecticut State Senate, 2012). In the State of Connecticut, in 2012, about 60 percent of community college students were enrolled in developmental/remedial courses and only 8 percent of these students earned credentials in about three years (Complete College America, 2012; Turk, Nellum, & Soares, 2015). This problem is an apparent obstacle to improving college completion rates and increasing Connecticut’s college-educated workforce.

In response to this problem, the Connecticut General Assembly approved Public Act 12-40 that called for the reform of developmental education at CSCU public institutions and the
creation of new courses that embed developmental writing support with college-level English courses (State of Connecticut Public Act 12-40, 2012). Developmental education reform in the Connecticut community college system did not eliminate remedial courses; it just changed how remediation is delivered. The revised delivery system consists of college-level courses embedded with remedial support. The intended goal of an embedded English course is to help incoming community college students gain competencies in reading/writing that are needed to successfully complete other course requirements and, ultimately, earn graduation credentials (Public Act 12-40, 2012). Even though embedded courses are in place at some public community colleges, there is still a high-level of uncertainty about the benefits gained by underprepared students who enrolled in these courses (Callahan, & Chumney, 2009; Turk, Nellum, & Soares, 2015). On the contrary, the participants in this research study claimed that embedded-level English courses, specifically English 101-ALP, have considerably improved students’ learning outcomes. However, this claim may not be the opinion of all instructional faculty members teaching in the CSCU system.

**Significance of Research Problem**

A massive number of students continue to enter community colleges “…without grade-level competency or the proper preparation for college-level material” (Bettinger, 2013, p. 95). In the State of Connecticut, nearly two-thirds of incoming community college students are not academically ready to undertake college-level work (Turk, Nellum, & Soares, 2015). The large proportion of community college enrollees needing academic remediation makes a strong case for exploring reformed developmental formats, such as embedded courses. Addressing the remediation problem is of great significance to United States federal and state policymakers as well as higher education administrators who are focused on the “nation’s college completion

At the federal level, emphasis is on graduating more academically prepared students from colleges and meeting 21st century labor force demands (Carnival, & Rose, 2011; Handel, 2013; Parker, 2012; U.S. Department of Education, 2011-2014). Moreover, the previous presidential management, President Barack Obama’s administration, approved over $2 billion for postsecondary education to support the mission of U.S. community colleges (U.S. Department of Education, 2011-2014 (Handel, 2013; Parker, 2012). With the continual help of public community colleges, federal legislators predict that most underprepared students could eventually transfer to four-year institutions and earn bachelor’s degrees (Handel, 2013; Parker, 2012).

At the state level, in accordance with federal plans that offered funding incentives, legislators introduced statewide higher education policy that called for improvements of academic curricula, student course outcomes, and graduation rates at public community colleges (Boatman, 2012: Bailey et al., Jaggars, & Scott-Clayton, 2013; Bettinger et al., 2013; Boatman, & Long, 2013; Edgecombe et al., 2014; Jaggars, & Stacey, 2014; Mayer et al, 2014; Rath et al., 2013). These are significant challenges for community college administrators, who are already obligated through an open admission policy to matriculate and education a large population of unskilled and underprepared enrollees (Bettinger, 2013; Carnival & Rose, 2011; Jaggars, 2011; Jenkins, Speroni, Belfield, Jaggars, & Edgecombe, 2010; Zeidenberg, Jenkins, & Calcagno, 2007). However, given this policy, community college leaders must continue to seek better
remedial delivery formats to ensure that students successfully complete courses and obtain credentials on time (U.S. Department of Education, 2011-2014).

**Research Benefit to Audience**

The primary audience for this research is the population of community college faculty teaching embedded, or ALP English courses. According to investigators, research studies on faculty teaching integrated or accelerated courses are limited (Bickerstaff & Raufman, 2017). The findings from this research study are relevant to the expanding body of research literature intended to inform community college faculty, as well as administrators and deans, about best practices in teaching embedded/ALP courses.

**Research Questions**

This research study was conducted to explore faculty members’ perceptions and experiences teaching an embedded English course. The research questions were designed to help guide the research and examine the personal accounts of faculty members who are most familiar with teaching embedded courses at a CSCU community college. The central question and sub-questions are as follows:

**Central Question.**

The central question seeks to discover whether research participants perceived changes or improvements in students’ writing habits and assessment milestones. The question is as follows: To what extent, as perceived by teaching faculty, does the embedded course resolve community college students’ skill-deficiencies in writing?

**Sub-questions.**

The sub-questions addressed research participants’ viewpoints regarding the instructional format of an embedded course and its influence on their own instructional approaches and
motivations. Moreover, these research questions attempt to identify key components of the embedded course, and how faculty members perceive the significance of these components on their teaching/learning processes and on student outcomes. These sub-questions are:

1. What design elements of the embedded course do faculty perceive as having the most influence in helping, or not helping, underprepared students acquire competencies to successfully complete the course?

2. How do faculty members describe the embedded delivery method and its influence on their general instructional practices?

3. What issues associated with the writing deficiencies of underprepared students do faculty feel are not being addressed through embedded-level courses.

Responses to these inquiries were collected from research participants; codes were generated to identify consistent themes and form meaningful descriptions (Crewsell, 2009).

**Summary of Content and Organization**

1) The introductory chapter of this document provides an in-depth explanation of the intent of the research study. 2) The theoretical framework chapter defines Robert Gagné’s instructional theory and explains its relevancy to major components of the research study, including how it frames the research questions, the research methodology, and analysis. 3) The literature review includes three relevant themes: defining the embedded course; delivery of remedial support through integrated courses, and controversial perspectives in the literature. 4) The research design chapter examines the research questions. The qualitative research methodology is also reflected in the research design, along with the location of the research study, the number of participates, and the data gathering and analysis processes. The research design concludes with the validity and credibility of the research study. 5) The last chapter,
protection of human subjects, in this document discusses possible risks that could jeopardize the confidentiality or safety of the participants of the study as well as the integrity of this research project.

**Definition of Terms**

In this research study, the following terms and definitions are used as defined below:

**Accelerated learning program (ALP):** The (ALP), which originated at the Community College of Baltimore County, allows students to enroll in a traditional English 101 course while concurrently enrolled in a developmental writing course. This type of learning model is identified as “… the reorganization of instruction and curricula in ways that facilitate the completion of educational requirements in an expedited manner” (Edgecombe, 2011, p.4). Essentially, developmental sequences are mainstreamed, or integrated, with college-level credit courses.

**Course completion:** Jaggars (2011) described course completion as “a fundamental measure of student success…” (p.7). Successful completion of college courses ultimately leads to a degree or certificate.

**College-level English:** Typically, at most colleges, the first-year mainstream English course that a student takes is college-level English 101 (Jenkins, Speroni, Belfield, Jaggars, & Edgecombe, 2010).

**Developmental or remedial:** Le, Rogers & Santos (2011) defined developmental education as “…the broad array of services offered to students who are in college but lack the academic preparation to succeed in entry-level courses” (p. 5). In several research journals, the terms developmental and remedial have similar meanings to define coursework that is rated below the standard college-level courses and to describe basic skills education such as remedial
English (Bailey et al, 2010; Barbatis, 2010; Bettinger, Boatman, & Long, 2013; Calcagno, & Long, 2009; Edgecombe, 2011; Parker et al, 2010; Relles & Tierney, 2013; Xu, 2016).

**Embedded or integrated courses:** There is limited research that specifically uses the term *embedded* courses in postsecondary education; however, findings from modern research studies discuss the embedded-level strategy as one of the main accelerated practices. The embedded course is a reformed remedial strategy that has been characterized as “…college-level instruction with embedded developmental support designed for students with 12th grade skills (or close to that) who are approaching college readiness but require some remediation…” (Brakoniecki, Fitzgerald, & Pritchard, 2013; Connecticut State Senate, 2012; ConnSCU Initiatives, 2012). Embedded courses, unlike traditional non-credit developmental sequences, are mainstream credit-bearing courses that contribute toward an undergraduate credential.

**Underprepared students:** Underprepared or unprepared describes recent high school graduates, or other newly enrolled community college students, who have not mastered fundamental skills in mathematics and/or English reading/writing (Fritz, 2010; Relles & Tierney, 2013; Wathington et al, 2011; Wilmer, 2008). Basically, these students are not ready for mainstream coursework; their skills are insufficient for completing college-level writing tasks (Bahr, 2012; Bailey et al, 2013; Hawley & Chiang, 2017; Xu, 2016).
Theoretical Framework

For decades, various instructional theories have been studied and evaluated in search of better methods to facilitate learning (Reigeluth, & Carr-Chellman, 2009). This research study was informed by instructional theory as described by Robert Gagné. Robert Gagné’s instructional theory, grounded in behaviorism and constructivism, was selected to help frame important components and processes of the embedded instruction (Morrison, Ross, & Kemp, 2007). This includes analyzing instructors’ viewpoints and describing their instructional practices that are relevant to teaching the embedded-level course. Over the years, Gagné’s instructional theory has been applied to educational instruction for use in traditional classrooms and online environments, especially for defining learning goals and learning hierarchy (Morrison, Ross, & Kemp, 2007; Schunk, 2008). Gagné’s learning hierarchy represents “…a set of component skills that must be learned before the complex skill of which they are a part can be learned” (Gagné, 1985). Learning hierarchies list the order of prerequisites according to learning complexity, and then sequence the instructions (Gagné, 1985). This concept was useful when outlining the sequencing of remedial and mainstream instructional activities associated with the embedded course model and analyzing faculty’s insights of variables that influence successful learning outcomes (Morrison, Ross, & Kemp, 2007; Schunk, 2008).

Description of Instructional Theory

Gagné’s instructional theory became widely recognized through its influences in corporate/government training programs, public schools, and universities. It focused on instructions that were intended to design learning environments that facilitated learning and helped students meet or exceed expected competences (Morrison, Ross, & Kemp, 2007). In this model, instructional theory is identified as a “…method that will best provide the conditions
under which learning goals will most likely be attained (Driscoll, 2005, p.352). In short, Gagné’s theory demonstrates how best to stimulate learning through interactive and supportive instruction. Most often, this is accomplished through connections among instructional goals (categorized into various learning outcomes), meaningful activities, supportive learning conditions, and assessments (Driscoll, 2005; Schunk, 2008). Other researchers who demonstrated consistency with Gagné’s concepts interpreted instructional theory in this way: "An instructional theory is a unified set of principles, based upon learning theory, other relevant theories, and sound replicable research, that permits one to predict the effects of specific instructional conditions on learner's cognitive processing and the resulting learned capabilities” (Smith, & Ragan, 1996, p. 728). These explanations offer explicit schemes for outlining crucial aspects of the research topic.

Instructional theory stemmed from prominent research conducted by several pioneers in the fields of education, human intellectual development, and psychology. Those pioneers included David Ausuble, Benjamin Bloom, Jerome Bruner, John Dewey, Robert M. Gagné, Jean Piaget, Lev Semenovich Vygotsky, and Burrhus Frederic Skinner. Gagné’s contributions to instructional theory, grounded in behaviorism and constructivism learning principles, emerged in the United States during the early 1960s (Smith & Ragan, 1996).

**Behaviorism.**

Behaviorist views are evident in Gagné’s work that focused on reciting verbal information, and breaking learning content into small instructional steps, and then repeating those lessons (Schunk, 2008; Smith & Ragan, 1996). Behaviorist learning theory emerged in the early twentieth century. This theory is rooted in psychology and is widely known for its association with the works of Skinner. From Skinner’s perspective, behaviorism highlights the
role of the learning environment and focuses on relationships between stimulus and responses (Driscoll, 2005; Morrison, Ross, & Kemp, 2007; Schunk, 2008). Moreover, it is associated with external situations that exhibit repetition of favorable actions, rewards for acceptable responses and discouragement of unacceptable behaviors (Driscoll, 2005; Schunk, 2008). In traditional classroom learning and online instruction, the behaviorism method gives students the opportunity to respond to stimuli and receive frequent feedback from the instructor, which is put forth to influence effective learning (Driscoll, 2005; Schunk, 2008). In online instruction, the behaviorism method is observable using interactive instructional content, which includes tutorials, repeated practice drills, and constant feedback (Ouyan, & Nile, 2014). These behaviorism approaches could be useful in understanding and defining the most effective components of college-level embedded instructions.

**Constructivism.**

Interactive instruction that facilitates students toward understanding concepts and applying their knowledge reflects constructivism (Schunk, 2008; Smith & Ragan, 1996). Many theorists, including Dewey, Piaget, and Vygotsky, have influenced constructivism; however, Vygotsky stands-out among these prominent theorists for creating the general groundwork for modern constructivism (Driscoll, 2005; Schunk, 2008). Vygotsky is widely known for his interpretation of “social mediation of knowledge construction,” and other standpoints which Gagné and other theorists reflected in their work (Schunk, 2008, pg. 235). Vygotsky’s main concept stresses the importance of sociocultural interactions, language, self-regulation, and the “zone of proximal development” (ZPD) in cognitive growth (Driscoll, 2005; Schunk, 2008). ZPD describes the learner’s developmental readiness in a specific topic area to perform tasks without the assistance of the teacher (Schunk, 2008; Driscoll, 2005). According to Vygotsky
(1978), ZPD is “…the distance between the actual developmental level as determined by the independent problem solving and the level of potential development as determined through problem solving under adult guidance or in collaboration with more capable peers” (p. 86). Overall, Vygotsky was most concerned with observing the active learner and examining the independent actions and skills that learners can perform in social settings (Driscoll, 2005; Schunk, 2008).

Constructivism suggests that students are active learners who take control of their own learning processes (Schunk, 2008; Smith & Ragan, 1996). It emphasizes an integrated design that supports self-regulated learners. In terms of academic remediation, Johnson (2008) stated that instruction should be organized and presented in such a way that learners are encouraged to set their own learning goals, explore their own interests, monitor their own progress, and work collaboratively with other course participants. Like the constructivist approach, Gagné’s learning strategies (executive control processes) reflect self-regulated learning methods. In this case, students apply intellectual strategies to manage their own learning and performance abilities (Schunk, 2008; Smith & Ragan, 1996). This includes thinking independently, recalling relevant information during testing, using trial-and-error methods, and applying multiple approaches to solve routine problems (Schunk, 2008; Smith & Ragan, 1996).

**Conditions of Learning.**

According to educational researchers, the conditions of learning theory is one of Gagné’s most systematic contributions to the study of instructional theory (Schunk, 2008; Smith, Ragan, & Tillman, 1996). Over time, Gagné’s model has evolved from a behavioral concept to a systematically cognitive approach (Driscoll, 2005; Schunk, 2008). Researchers suggested that most inquiries of instruction should include a review of Gagné’s conditions of learning theory to
help understand the process of student learning (Driscoll, 2005; Schunk, 2008; Smith, Ragan, & Tillman, 1996). Gagné’s taxonomy identifies five categories of learning: They are intellectual skills, verbal information, cognitive strategies, motor skills, and attitude. These learning categories provide specifics of outcomes-based instruction (Driscoll, 2005; Schunk, 2008; Smith, Ragan, & Tillman, 1996). These categories of learning will be discussed in the next section of this document.

**Taxonomy of learning outcomes.**

Driscoll (2005) suggested that Gagné was widely known for recommending a cohesive grouping of learning outcomes that consisted of multiple domains. Undeniably, prominent theorists other than Gagné, such as Benjamin Bloom, who developed a taxonomy of cognitive outcomes, contributed significant taxonomies to the field of education. However, Gagné’s model of learning outcomes demonstrated specifics of outcomes-based instruction, which is still relevant today, particularly when designing effective and efficient instructions (Gagné & Driscoll, 1988; Driscoll, 2005). Gagné’s five categories of learning outcomes are as follows:

1. Motor skills are outcomes defined as “…precise, smooth and accurately timed execution of performances involving the use of muscles” (Driscoll, 2005, p. 364; Gagné & Driscoll, 1988, pg. 59). Motor skills are developed progressively with repetitive and persistent practice. Examples of motor skills include forming appropriate letters with a pen or typing on a keyboard. The critical learning conditions associated with these motor skills would involve encouraging the use of mental practice to help students reach maximum competitive status, provide immediate and constant feedback, and arrange situations for students to repeat practice drills (Driscoll, 2005; Gagné & Driscoll, 1988).
2. Intellectual outcomes (procedural knowledge) include the ability to define concepts, use definitions, understand terms, generate inferences, and apply rules to specific problems, such as constructing grammatical sentences, categorizing and discriminating data (Driscoll, 2005). Discrimination in this context means “…the ability to distinguish, on the basis of perceptual characteristics, one object from another, one feature from another, one symbol from another” (Driscoll, 2005, p. 360). To promote learning in this area, provide students with distinctive features of objects and present verbal cues to the organization of component skills (Driscoll, 2005).

3. Verbal information involves reciting facts, concepts, and/or principles that are learned through multiple forms of media and learning situations, such as formal education, television, and books (Driscoll, 2005; Gagné & Driscoll, 1988). For example, asking students to list the parts of speech or list the sections of a proposal demonstrates recitation of facts/concepts. The suggested critical learning conditions for verbal information include calling individual attention to core components by using italics and boldface print in electronic books, voice inflections and gestures during onscreen/onsite lectures (Driscoll, 2005; Gagné & Driscoll, 1988). This method could be applied to online or onsite embedded instructions. It is suggested that the instructor offer prompts to help students recall information, and present core information in chunks to stimulate comprehension. In this way, students could paraphrase lessons learned or explain the knowledge that was acquired (Driscoll, 2005; Gagné & Driscoll, 1988).

4. Cognitive strategy outcomes are often applied in combination with Gagné’s other learning goals to solve problems, such as reasoning and planning. Cognitive strategies are still major areas where underprepared students need the most help to complete college-level courses, specifically English and mathematics (Conley, 2007). Underprepared students need learning
conditions that demonstrate cognitive and planning strategies, provide opportunities for practice using the intended strategy, and provide informative feedback (Bailey, Bashford, Boatman, Squires, Weiss, Doyle, Valentine, LaSota, Polanin, Spinney, Wilson, Yeide, & Young, 2016).

5. Attitude is an important learning outcome of Gagné’s taxonomy. Gagné (1971) defined attitude as an acquired internal belief or state that influences the learner’s choices of what personal actions to display. Attitude influences students’ decisions and feelings toward people and situations, which affects their learning experiences. Researchers suggested that faculty could design corresponding conditions of learning into the learning module and provide opportunities for students to communicate and/or practice making rational choices (Driscoll, 2005; Gagné & Driscoll, 1988). Another suggestion is to connect the learning condition with the preferred attitude, and then reinforce positive attitudes by giving constant feedback (Driscoll, 2005; Gagné & Driscoll, 1988).

Over several decades, Gagné’s taxonomy has been widely used to design and analyze appropriate instructional strategies and training materials for various environments. In view of this research study, these classifications of learning provide a foundation for understanding basic learning outcomes that could be relevant to research participants’ perceptions of students’ expected learning outcomes and their own teaching practices. Moreover, Gagné’s offers a theoretical orientation to the embedded strategy to help give focus to the following question: What design elements of the embedded course do faculty perceive as having the most influence in helping students acquire competencies in English writing to successfully complete their courses? The next chapter represents a blend of scholarly documents.
Chapter 2: Literature Review

Introduction

The literature review in this research study provides a synthesis of researchers’ discussions and findings, published from 2005 through 2017. Sources for this literature review included peer-reviewed journals from Northeastern University online library system, ERIC (Education Information Research) online database, EBSCOhost online research database, ProQuest database, Google Scholar and other databanks. From these sources, a significant body of literature emerged that investigated developmental education reform, and integrated English writing courses.

The call for developmental education reform is a common theme throughout the research literature due to the existing gap between college expectations and incoming students’ low proficiencies in basic skills despite the long-term use of developmental courses (Carnival & Rose, 2011; Jaggars, 2011; Parker, Bustillos, & Behringer, 2010; Xu, 2013). Research findings indicated that traditional models of developmental courses were criticized for wasted expenditures and failing to improve students’ skill-levels. (Bailey, Jeong, & Cho, 2010a; Handel, 2013; Fike & Fike, 2012; Jaggers, 2011; Jaggars & Hodara, 2011; Parker, 2012). Moreover, developmental courses were unsuccessful, and remedial sequences delayed students’ progression through college-level courses, and later deferred degree completion (Bailey, Jeong, & Cho, 2010a; Handel, 2013; Fike & Fike, 2012; Jaggers, 2011; Jaggars & Hodara, 2011; Parker, 2012). For these reasons, traditional developmental instruction lost its appeal and, subsequently, researchers shifted their research studies from outdated developmental education, revamped during 1977 by the National Center for developmental Education (Boylan, & Bonham, 2007), to integrated and accelerated writing and mathematics formats.
For the most part, the delivery of academic remediation remains a vast challenge for community college administrators, deans, and instructors due to the large proportion of new enrollees who are inadequately prepared to read and write on the college-level (Bailey, 2009; Bailey, Jeong, & Cho, 2010b; Handel, 2013; Jaggars, Hodara, Stacey, 2013; Levin, 2008). Federal policymakers have attempted to close this academic gap by distributing funding incentives to public community colleges to design new academic interventions that have potential to boost student persistence, and course/college completion rates (Cominole, Riccobono, Siegel, & Caves, 2010; Dougherty et al., 2016; U.S. Department of Education, 2011-2014). Sequentially, community college have made firm attempts to provide academic interventions to first-year students by offering different types of developmental support, including the use of embedded courses.

**Defining the Embedded Course**

U.S. public degree-granting community colleges in the United States registered over ten million students in 2012 (IES NCES, Table 308.10, 2012-2013), which is about half of all undergraduates enrolled in U.S. postsecondary institutions (Handel, 2013; Jaggars, & Stacey, 2014), and nearly 50 percent of these students need remediation in basic mathematics, reading and writing to be successful in mainstream college courses (Bahr, 2012; Quint, Jaggars, Byndloss, & Magazinnik, 2013). Defining academic strategies that address this momentous problem is a primary concern of community college administrators. To date, several possible solutions have been identified that have potential to solve the remediation issue. One such remedial delivery format is the embedded course.

The embedded, or integrated, course is perceived as a flexible instructional strategy for teaching basic skills in English composition, reflective writing, critical thinking, information
literacy, and English language for ESL students (Gunn, 2011; Salamonson, Koch, Weaver, Everett, & Jackson, 2010). Moreover, the embedded course is geared for delivering literacy fundamentals and college-level English instructions together in one course, giving students the chance to build basic skills, meet learning objectives, and earn college credits in a timely matter (CCCSE, 2016; ConnSCU Initiatives, 2012; Gun, 2011). In some community colleges, the embedded, or integrated, course is perceived as a favorable replacement for traditional developmental courses (ConnSCU Initiatives, 2012; Jenkins, Speroni, Belfield, Jaggars, & Edgecombe, 2010).

In recent research findings, the most germane practice that replaced traditional developmental education is the accelerated learning approach (Jaggars, Hodara, Cho, Xu, 2015). The accelerated practice offered a starting point for underprepared students to improve basic skills and gain college credits thus accelerating them toward earning college credentials. In the literature, findings revealed three main types of college-level accelerated strategies: They are embedded, compressed, and paired courses (Bettinger, Boatman, & Long, 2013; Edgecombe, 2010; Gunn, 2011; Hitchens-Smith, 2011; Jenkins et al., 2013). The research study examines only embedded-level courses, which have similar benefits to other accelerated designs such as offering college credits, shortening the duration that underprepared students spend in remedial courses, and combining remedial support with mainstream college-level instruction (Rutschow, & Schneider, 2011; Zachry & Schneider, 2008). According to the literature, accelerated designs are perceived as promising approaches for improving community college students’ English writing skills (Bettinger, Boatman, & Long, 2013; Edgecombe, 2010; Gunn, 2011; Hitchens-Smith, 2011; Jenkins et al., 2013). In some cases, students who participated in at least one of the accelerated formats as compared to nonparticipants showed the most potential in completing
college-level courses (Jaggars, Hodara, Cho, Xu, 2015). However, there is limited empirical evidence on the community college-level that validates students’ actual attainment of college-level writing skills using accelerated curriculum (Attewell, 2006; McCurrie, 2009; Melguizo, Bos, & Prather, 2011). Despite definitive indications of success, the accelerated approach has gained extensive attention because this strategy allows underprepared students to enroll in mainstream credit-bearing English courses, without taking a series of noncredit prerequisite developmental classes (Bailey et al., 2013; Boatman, 2012; Bragg et al., 2010; Handel, 2013; Fike & Fike, 2012).

**Delivery of Remedial Support through Embedded Courses**

This section discusses findings on the most recent embedded, or integrated, courses, investigated at contemporary community colleges. At community colleges, long-standing traditional developmental sequences have been replaced with credit-bearing embedded courses or similar reformed academic support (CCCSE, 2016; ConnSCU Initiatives, 2012; Connecticut State Senate, 2012; Jenkins, Speroni, Belfield, Jaggars, & Edgecombe, 2010). For the most part, the transformation of developmental education was in response to the national objectives that called for better academic preparation for the U.S. workforce and an increase in the number of college graduates (CCCSE, 2016; U.S. Department of Education, 2011-2014). From this transformation emerged a wide-range of accelerated learning programs and embedded courses with the purpose of improve writing skills of low-performing students and increasing course completion rates.

For example, Chabot College, a two-year public postsecondary institution in California, offered an accelerated English course that incorporated writing remediation, college-level English, and other support features to strengthen underprepared students’ academic skills and
help students move quickly through course completion (Edgecombe, Jaggars, Xu, & Barragan, 2014; Wilson, Davis, Don linger, Li, & Warren, 2010; Wilson et al., 2010). According to Wilson et al. (2010), analysis of Chabot College’s accelerated English course yield an 80% student success rate and a 90% student retention rate (Wilson et al., 2010). Moreover, findings from this research study revealed that participants who enrolled in the accelerated course model completed more mainstream courses and earned related college credits (Bettinger, Boatman, & Long, 2013; Edgecombe, Jaggars, Xu, & Barragan, 2014; Hern, & Edgecombe, 2012). In the Chabot College study, results showed indication that accelerated formats have the potential to increase the academic skill-levels of some underprepared community college students (Edgecombe, Jaggars, Xu, & Barragan, 2014).

Another practical design that promised to promote success and quicken progress among first-year community college students was presented by Jenkins, Zeidenberg, and Wachen (2009). The research study examined the Digital Bridge Academy (DBA) model implemented at Cabrillo Community College, in California. The Digital Bridge Academy (DBA) was designed as a one-semester accelerated curriculum model. It incorporated college-level English courses integrated with literacy skills support, study groups, academic counseling, and other academic supportive services (Jenkins, Zeidenberg, & Wachen, 2009). The participants of DBA consisted mainly of underprepared or at-risk students representing a wide-range of demographics. Jenkins et al., stated that since “…most of the participants in DBA require remediation, program staff referred to this approach as “acceleration,” since it allowed remedial students to take college-level courses, in effect skipping the remedial sequence” (Jenkins, Zeidenberg, & Wachen, 2009, p.2).
The research at Cabrillo involved examining the effectiveness of the DBA course model, and its impact on the learning outcomes of academically disadvantage minorities who participated in the DBA study. This research study included the comparison of DBA participants against the non-DBA students at Cabrillo. Findings revealed that participants in the accelerated form of the DBA curriculum were most likely to advance through an associate-degree-level English course than non-participants. Overall, students who participated in the integrated curriculum demonstrated some academic improvement and showed potential in completing the college-level course. Jenkins et al., (2009) stated that “…accelerated DBA students had a probability of passing that was 42 percentage points higher than control group students” (p. 12). Even though, most participants in the DBA group experienced positive academic outcomes, the research study only provided a preliminary test of DBA’s capability; therefore, the findings do not present conclusive evidence of DBA’s success rate and its correlation with the achievement rates of underprepared students (Jenkins et al., 2009).

From the bodies of literature emerged another widely discussed remediation delivery method introduced by the Community College of Baltimore County (CCBC) (Jenkins, Speroni, Belfield, Jaggars, & Edgecombe, 2010). The design was referred to as the Accelerated Learning Program (ALP) model, which represented a mainstreamed approach involving students taking a college-level sequence (English 101 or English 102) along with a supplementary course that provided basic writing support (Jenkins, Speroni, Belfield, Jaggars, & Edgecombe, 2010). According to the research, “mainstreaming” strategies typically accelerate developmental students’ progress, which involves placing students directly into college-level courses, thus bypassing the traditional remedial course sequence (Edgecombe, 2011; Rutschow, & Schneider, 2011).
The research study conducted at CCBC investigated the effectiveness of the ALP to accelerate the academic progress of community college students who required remediation in English writing (Hodara, & Jaggars, 2014; Bailey, Jeong, & Cho, 2010a; Jenkins, Speroni, Belfield, Jaggars, & Edgecombe, 2011). The results of the research showed that the ALP participants who were placed into the highest-level developmental writing course were also associated with better outcomes in completing the CCBC’s mainstream English 101 and English 102 courses. In general, some concerns existed regarding the overall study. However, the investigators suspected that selection bias existed during the ALP research study (Jenkins, Speroni, Belfield, Jaggars, & Edgecombe, 2010). Consequently, the research findings did not present definitive proof to validate that the ALP courses led to successful outcomes for the ALP participants (Jenkins, Speroni, Belfield, Jaggars, & Edgecombe, 2010). Researchers familiar with the CCBC project explained that differences in students’ motivations, and/or previous academic accomplishments may have influenced outcomes (Zachry & Schneider, 2011). Nevertheless, in the existing research findings, investigators presented preliminary conclusions that the ALP intervention has potential to improve basic English writing skills of underprepared students and raise course completion rates within a reasonable timeframe and budget (Jenkins, Speroni, Belfield, Jaggars, & Edgecombe, 2010).

Another research study of interest was the Tennessee Board of Regents system, which includes 13 community colleges and serves an increasing population of underprepared students. At the point of enrollment, and according to their assessments, students are placed in one of community college’s credit-bearing mainstream writing sequences (Huse, Wright, Clark, & Hacker). These integrated mainstream courses were geared to provide remedial support and teach underprepared community college students how to construct research-based reports (Huse,
Wright, Clark, & Hacker, 2005). The outcome of this research revealed that some of the course participants demonstrated acceptable skill competencies in writing, while others experienced challenges with using writing resources and engaging in weekly tutoring sessions, which resulted in failure of the first course in the sequence (Huse, Wright, Clark, & Hacker, 2005).

Collectively, research on college-level integrated or accelerated courses did not generate notable outcomes in the most important criteria, including English writing skills, retention, and course completion rates. Differences in students’ motivations, and/or previous academic accomplishments may have influenced outcomes (Zachry & Schneider, 2011). Nevertheless, there are no firm conclusions among literature findings that integrated strategies or any other remediation practices are effective in closing the gap in students’ skills in writing (Bettinger et al., 2013; Edgecombe, 2011; Edgecombe, Jaggars, Xu, & Barragan, 2014; Jaggars, & Stacey, 2014; Jenkins et al., 2010; Relles & Tierney, 2013; Zachry & Schneider, 2008). In the literature, there is no definitive proof to validate that integrated courses will lead to successful outcomes for all academically disadvantage students at the community college level. However, according to the literature, integrated courses still have more potential than traditional developmental courses in influencing course completion rates (Jenkins, Speroni, Belfield, Jaggars, & Edgecombe, 2010).

Controversial Perspectives in the Literature

Whether to use accelerated or embedded writing courses is a debatable matter because it is assumed that developmental course reforms cannot be generalized to all incoming community college students (Attewell, 2006; McCurrie, 2009; Melguizo, Bos, & Prather, 2011; NCES, 2016). Researchers argued that there could be potential for pitfalls in using integrated courses due to the high concentration of students with severe learning deficiencies (Bragg, Baker, &
Researchers emphasized that specific types of integrated courses will not benefit some underprepared students due to distinct postsecondary demographics and measurable academic deficiencies (Attewell, Lavin, Domina, Levey, 2006). It is suggested that college students with austere deficiencies in basic reading and writing skills are most likely to experience higher rates of failure in college-level integrated courses (Bahr, 2010; Shulock, & Koester, 2014). Moreover, these students may not gain the same proficiency levels from English writing remediation as students who demonstrated moderate deficiencies in reading/writing skills. Consequently, integrated courses could be less effective for low-performing students, and subsequently, limit their academic progress toward completing college-level courses (Gunn, 2011; Morrison et al., 2007). According to McCurrie (2009), in some cases, academic remediation in basic skills was provided too late in some students’ learning experiences to have a positive impact on their academic progress in integrated courses.

Researchers in the literature argued that basic reading/writing instructions should have been taught in secondary school prior to entering college (Parker, Bustillos, & Behringer, 2010).

According to researchers, the preferred strategy is to align high school and college curricula to ensure that college bound students acquire prerequisite academic skills necessary to succeed in college (Bailey, Jeong, & Cho, 2010b; Bettinger et al., 2009). For example, state-level policymakers of California and Florida called for the reform of remediation at public high schools; educators responded by implementing college readiness testing and remedial training for low-performing high school students (Bailey, Jeong, & Cho, 2010a). The results of these high school interventions revealed some successful outcomes; yet, researchers claimed that paying for similar courses both at the secondary level and at the postsecondary level is wasteful (Bailey, Jeong, & Cho, 2010a; Bettinger et al., 2009). Though, lack of funding for
Developmental help in high school or first-year community college courses could leave a gap in students’ English writing skills that could negatively impact their overall college success rates (Gunn, 2011; Jaggars, Hodara, Stacey, 2013).

Discussion and Conclusion

Collectively, researchers agreed that remediation needs are still widespread among first-year community college students and some form developmental support is needed to enhance students’ skill in basic writing (Edgecombe, Jaggars, Xu, & Barragan, 2014; Jaggars, & Stacey, 2014; Handel, 2013; Rath, Rock, & Laferriere, 2013). Researchers acknowledged that promising embedded, or integrated, writing courses continue to be developed at community colleges; however, there, are no firm conclusions whether any of these formats are effective in improving students’ persistence, increasing course completion, or promoting graduation rates (Bettinger et al., 2013; Edgecombe, 2011; Gunn, 2011; Relles & Tierney, 2013; Zachry & Schneider, 2008; Zeidenberg, Cho, & Jenkins 2010). Moreover, literature findings suggest that, researchers are not certain whether integrated courses are suited for all underperforming community college students (Bragg, Baker, & Puryear, 2010; Jenkins et al., 2010).

Despite these short-comings, integrated English writing courses have gained popularity among public community colleges because all first-year students can enroll in these courses, earn college credits, without taking a series of noncredit prerequisite developmental classes (Bailey et al., 2016; Boatman, 2012; Bragg et al., 2010; Handel, 2013; Fike & Fike, 2012). This format provides greater opportunities for academically disadvantaged students to receive academic support and complete first-year courses within a set timeframe (Bailey, Jaggars, & Scott-Clayton, 2013; Bettinger, Boatman, & Long, 2013). However, the expenses required for remedial support and academic preparation on the community college-level are costly.
The next chapter will focus on the research design of this study, which develops an in-depth understanding of faculty members’ perspectives of embedded level courses at a community college.
Chapter 3: Methodology

Introduction

This qualitative research study provides insight on how two faculty members perceived their personal experiences teaching college-level English courses embedded with remedial support. Creswell indicates, in general terms, that the process of qualitative research “…involves emerging questions and procedures, data, typically collected in the participant’s setting, data analysis inductively building from particulars to general themes, and the research making interpretations of the meaning of the data” (2009, p. 4). In view of these areas, this chapter presents the methodological framework for this research study. The sequence of approach is based on the principles of interpretative phenomenological analysis (IPA) that acknowledges the interpretation of the interviewees’ “meaning-making” of their personal teaching experiences. Furthermore, the topics in this section include research design, research questions, site and participant selections, data collection, data analysis, and validity and credibility.

Research Design

The modern IPA inquiry approach has emerged in qualitative research studies in several fields. IPA has taken a leading position in the areas of health, psychology, and education (Smith, Flowers, & Larkin). The IPA methodology was selected for this investigation to understand the lived involvements of community college English instructors who facilitated embedded-level courses. IPA was most appropriate for this research study because it is a “participant-centered” method; it places focus on the interviewees’ reflective awareness about phenomena (i.e., objects, events, tools, or situations) in their own teaching practices (Holland, 2014; Smith & Larkin, 2009). In this research study, IPA provided the appropriate analytical techniques and procedures to interpret and to examine the meaning of the faculty members’ lived experiences. It offered the
research investigator a structured process for examining the interviewees’ verbatim transcripts and making rational sense of the texts through patterns and themes (Larkin & Thompson, 2012; Smith & Larkin, 2009). In addition, IPA supported the research questions and provided a systematized process for gathering interviewees’ reflective thoughts, analyzing the respondents’ verbatim transcripts, and generating the texts into codes and relevant themes.

IPA originated in the psychology field and was later influenced by the principles of hermeneutics, idiographic phenomenology, and philosophy (Byrne, 1998; Holland, 2014; Smith & Larkin, 2009). The basic ideologies of phenomenology were founded by Edmund Gustav Albrecht Husserl an early phenomenology theorist of the twentieth century. Husserl’s study of phenomenology, along with epistemology and transcendental principles, examined the meaning of phenomena and the essence of how they appear in an individual’s conscience awareness (Byrne, 1998; Holland, 2014; Smith & Larkin, 2009). Husserl was interested in the structure of conscious experiences based on the participants’ subjective feelings and understandings about how they lived and engaged in their own practices (Biggerstaff, & Thompson, 2008; Holland, 2014). Overtime, Albrecht Husserl’s original characterization of phenomenology has been transformed and expanded by several other classical phenomenologists. One such phenomenologist was Martin Heidegger, a student and an assistant to Husserl. Heidegger’s, revisions to phenomenology resulted in the blending of phenomenology, ontology, and hermeneutics (Byrne, 1998). Heidegger preferred an interpretive approach; he conceived that language is the vehicle of thought where the question of being can be explained (Byrne, 1998). Essentially, Heidegger’s philosophy directs our attention to thinking about things and situations that occur in our own day-to-day, real-world activities. Another follower of Husserl’s phenomenology concept was Jean Paul Gustave Ricoeur, a modern philosopher, who
amalgamated phenomenological descriptions with hermeneutics to expand the scope of narrative theory (Lindseth & Norberg, 2014). Ricoeur’s phenomenological-hermeneutics model focused on interpreting interview texts, developing an understanding of the transcript, and relating themes to the interviewees’ lived experiences. For research studies “…lived experience has to be fixed in texts, which then always needs interpretation” (Lindseth & Norberg, 2014, p. 148). Basically, Ricoeur’s theory presents a more modern form of hermeneutic.

Modern hermeneutics is the process of understanding or deciphering transcripts, and according to the literature, it is used interchangeably with the principles of phenomenology (Byrne, 1998). In this sense, hermeneutic phenomenology examines aspects of the human experience as it is lived, and then gives meaning and understanding to the participant’s experience (Byrne, 1998; Laverty, 2003). The theory of hermeneutics has a long history stemming back to ancient Greece. Hermeneutics is a Greek term meaning interpretation; it is intended to explain or to translate language (Byrne, 1998; Laverty, 2003). Furthermore, modern hermeneutics is context depended whereby it defines how research interviewees interpret their own world, personal involvements, interests, passions and commitments (Byrne, 1998; Laverty, 2003). Similarly, research participants’ interpretations of their own daily activities are often communicated through self-reflections, spoken words and concepts. (Byrne, 1998; Laverty, 2003). These elements become the media where themes emerge (Laverty, 2003).

Also, the philosophical underpinnings of hermeneutics-phenomenology provide implications for the investigator regarding “bracketing,” or epoché (Byrne, 1998; Laverty 2003). Preparation for bracketing in research studies is usually well-planned prior to the data collection and analysis process (Byrne, 1998; Laverty, 2003). In terms of bracketing, Husserl’s principles of phenomenology recommended that the investigator undergo self-reflection to become aware
of personal biases and assumptions solely to bracket his or her own prejudgment. The investigator should begin the research study without preconceived ideas about what might be discovered, fact or fiction, during the research study (Byrne, 1998; Laverty, 2003; Tufford, & Newman, 2010). For example, the investigator of this study wrote notes and reflected on personal feelings about Connecticut’s Public Act 12-40, which was enacted in 2014, and its mandate to reform developmental education. This researcher set-aside personal biases and cognitions regarding this legislative change; thus, giving undivided attention to the observations and sentiments of the research participants.

**Research Questions**

The research questions were designed to guide the research study and to capture distinct experiences and perceptions of community college instructors who are most familiar with teaching embedded English courses at the selected Connecticut community college. The central question and sub-questions are as follows:

**Main Question**

1) To what extent does the embedded-level course resolve skill deficiency problems of underprepared community college students? This research question is intended to solicit insight regarding the use of embedded courses and its direct influence on the skills of underprepared college students as well as on their own instructional practices.

**Sub-questions**

2) What design elements of the embedded course do faculty perceive as having the most influence in helping, or not helping, underprepared students acquire competencies to successfully complete their courses?
3) What makes embedded remedial support different from other remediation approaches that have previously failed?

4) How would faculty members describe the embedded delivery method and its influence on their general instructional practices?

**Site Selection**

This research study was conducted at Middlesex Community College (MxCC), a public two-year postsecondary institution located on a 38-acre campus in Middletown, Connecticut, in the New England region of the United States. In 2010, the city of Middletown, situated along the Connecticut River in the central part of Connecticut, had a population of 47,648, which represented 76.7% white, 12.5% black or African-American, 9.6 Hispanic or Latino, and less than 4% other races/ethnicity (U.S. Census, 2010). Furthermore, the education achievement of the Middletown population in 2010 consisted of 91.9% high school graduates or higher, and 36.9% individuals holding bachelor degrees (U.S. Census, 2010). In that same year, Middletown residents living in poverty totaled about 11.4% (U.S. Census, 2010).

MxCC was founded in 1966 and accredited in 1971 by the New England Association of Schools and Colleges, Commission on Institutions of Higher Education. The selected community college, a Title IV federal financial aid institution, is comprised of 44 full-time and 161 part-time instructional faculty members (IPEDS, 2016). Student enrollment at the MxCC site represents mixed demographics—primarily gender, race/ethnicity, and age. According to IPEDS (2016), the enrollment at the selected site consisted of 2,733 students; 62% were 24-years of age and under, and 38% were 25-years of age and over. Enrolled students included 42% male and 58% female; race and ethnicity consisted of Asian 3%, Black or African-American 10%, Hispanic/Latino 19%, White 63%, two/more races 2%, and race/ethnicity unknown 3% (IPEDS,
The graduation rate for MxCC learners was only 20% in 2013 (IPEDS, 2016). This graduation percentage represents full-time, first-time community college students who enrolled at MxCC in the fall of 2013 and completed their academic programs within “150% of normal time,” which is about 3-years after matriculation (IPEDS, 2016). In comparison to other CSCU community colleges, MxCC has the third highest graduation rate behind Asnuntuck Community College (42%) and Quinebaug Community College (24%). Typically, Connecticut community colleges have low completion rates.

MxCC offers certificates, associate degrees and *Pathway Transfer Degrees* (PTDs) in various programs, including Accounting, Business Administration, General Studies, Liberal Arts, and STEM (MxCC, 2017-2018). Students admitted to PTD programs are expected to satisfy associate degree requirements, and then transfer to one of CSCU’s 4-year public institutions to complete a bachelor’s degree. The tuition to study under an MxCC academic program costs about $7,676 per academic year for in-state students (IPEDS, 2017).

The selected community college is under the CSCU system governed by The Connecticut Board of Regents for Higher Education, which was established by the Connecticut General Assembly in 2011. The CSCU system comprises four state universities, 12 community colleges, and one online liberal arts college. At the time of this research study, the Connecticut Board of Regents approved the consolidation of the 12 community colleges into one accredited Connecticut Community College by 2023 (CSCU, 2018). This consolidation plan “…drew sharp criticism from faculty members and students and was most recently rejected by the Regional Accreditation Commission in April 2018” (NBC CT, 2018, June 21).
I selected this site due to MxCC’s results based on the initial piloting of embedded courses and its diverse student population. The embedded courses were piloted during the Fall 2013 and Spring 2014 semesters, and the embedded English course appeared to be challenging for some MxCC students. Preliminary data through the second semester (Spring 2014) showed that only 25% of the MxCC students, who participated in the pilot, successfully completed college-level English 101 (Brakoniecki, Fitzgerald, & Pritchard, 2013). In view of this, it was anticipated that this public institution would provide practical and descriptive responses to the research questions because the developmental education problem at MxCC is widespread. The student body at MxCC includes several demographic groups, i.e., gender, race/ethnicity, age, and socioeconomic backgrounds, who are experiencing similar academic needs and challenges. These groups provided insight of how the remedial problem affects underperforming students of different demographic groups (King, McIntosh, & Bell-Ellwanger, 2017).

Participants

Research participants for this research study consisted of two (2) instructional faculty members who have had similar day-to-day experiences of the phenomenon under study. Other faculty members did not respond or were not interested in participating in this research study. Nevertheless, this investigator continued with the IPA study. According to the literature, an IPA study is more suitable for small sample sizes consisting of only two research participants or as many as 25 respondents (Abayomi, 2017; Holland, 2014; Smith et al., 2009). The faculty members were purposefully selected from the MxCC English Department. Maxwell (2005) defines purposeful selection as “…a strategy in which particular settings, persons, or activities are selected deliberately in order to provide information that can’t be gotten as well from other choices” (p. 88). For this research study, research participants were pursued based on their
practical knowledge of embedded/ALP English courses and their experience teaching at MxCC. The selected faculty members included a full-time Associate Professor of English and an Instructional Support Specialist of English, who have taught and supported embedded-level/ALP courses at MxCC for several semesters. Research study participants’ real-world involvements with postsecondary embedded courses contributed to answering the research questions.

**Data Collection**

The data collection process in this research study draws on the IPA method recommended by Creswell (2009), and Smith et al., (2009). The IPA approach involved gathering qualitative data through semi-structured interviews. The interview dates, times, and location were decided by the interviewees. The research participants requested to be interviewed by cellphone. Individual cellphone interviews were scheduled on different dates for the selected participants. However, the investigator used the same approach and administered the interview protocol in the same manner.

A consent form was emailed to the participating research interviewees; the consent form, was discussed prior to the interview. Interviewees acknowledged the consent form, and returned a signed copy to me. The semi-structured interview protocol was administered to the research participants through individual phone conversations. The interview protocol consisted of ten open-ended questions geared for initiating conversations and encouraging participants to elaborate on their lived experiences (Abayomi, 2017; Creswell, 2009; Jacob, & Furgerson, 2012). The questions were interactive and arranged from least difficult to difficult to help establish a relaxed interview setting in which participants felt comfortable responding to questions (Abayomi, 2017, Creswell, 2009). Research study participants were given the opportunity to describe their daily routines of teaching embedded-level English composition
courses. During the interviews, they willingly reflected upon their roles as facilitators/instructors of embedded courses, and described their student-teacher interactions with their students. Most importantly, the study participants indicated their understandings of the phenomenon in their academic environment and reflected on what they knew or believed about teaching embedded courses.

The interviews were audio-recorded and notes were taken to capture participants’ personal accounts of their lived experiences (Abayomi, 2017; Creswell, 2009; Holland, 2014; Smith et al., 2009). Initial interviews were set at 60-minutes through cellphone. Email was used to follow-up with participants after their first interview to clarify information on the interview transcripts (Holland, 2014; Jacob, & Furgerson, 2012). Integrating email and cellphone technologies into the data collection method is a common practice, and it is an efficient way to gather qualitative data (Abayomi, 2017; Creswell, 2009). In modern research projects, communication technologies have been used to enhance or replaced the traditional data collection process (Abayomi, 2017). Various technologies such as email, cellphone, video conferencing, Internet surveys, and online transcription services have improved the data collection process.

Results of the interviews were made anonymous using abstract numbers. Audio recordings of the interviews were saved on a password protected digital encrypted file without names or any identifying information that could be linked to respondents’ names, professional status, or locations (Abayomi, 2017). Secondary data about MxCC was collected from publicly available data from MxCC, the National Center for Education Statistics, and the IPEDS Data Center.
Research Sequence

After the approval of the Institutional Review Board, I compiled an email listing of potential MxCC participants. An email announcement, along with information explaining the purpose of the research study, was emailed to potential MxCC respondents inviting them to participate in the research study. Two faculty members accepted the interview invitation, and consent forms were emailed to these participants. The consent document was discussed prior to the initial interview; interviewees acknowledged the consent form, completed the document, and sent a signed copy to this researcher. The semi-structured interview protocol was administered to the research participants through individual phone conversations. Participants’ interviews were recorded through an audio device, and subsequently, their transcripts were analyzed.

Data Analysis

Qualitative data was collected from research participants to gain an understanding of participants’ daily work experiences at the research site. Using the IPA method, participants’ interviews were recorded through an audio device and analytic notes were taken by hand. Creswell (2009) recommended that researchers take notes by hand, in case of audio equipment failure. The interviewees’ audio recordings were transcribed by “Rev” an online third-party transcription service. Subsequently, the interview transcripts and recordings were reread by the investigator to reflect on participants’ tones, words, and phrases (Creswell, 2009; Larkin & Thompson, 2012; Smith & Larkin, 2009). Then, the transcripts were emailed individually to the research participants for review and comment.

The interviewees’ transcriptions were coded; this involved assigning verbatim statements from the transcripts to meaningful categories/themes (Larkin & Thompson, 2012; Smith & Larkin, 2009). NVIVO qualitative data analysis software and a manual process was used to
identify main categories (i.e., similarities, differences, repetitions, metaphors, and other patterns), and generate consistent sub-themes based on participants’ transcript annotations. In addition, Microsoft Excel was used to organize and group similar themes, and then reduce the number of categories based on the transcriptions. Steps have been taken to secure confidentiality and anonymity of respondents’ data and assure that participants’ audio responses will not be linked to participants' names. The results of this research study are stored in a data file encrypted with a password, on a password protected desktop computer.

**Validity and Credibility**

Security measures, such as using password protected files, were used to protect the respondents’ privacy and data confidentiality. Moreover, the research study was conducted ethically, and adhered to regulations and policies to protect the rights of human research participants as defined by Northeastern University's Institutional Review Board and the National Institutions of Health, Office of Extramural Research. The participants were purposefully selected and the semi-structured interview protocol was administered one-on-one by cell phone. This method provided low risk and it was non-invasive. To minimize potential threats to internal validity, appropriate content and design was selected for the interview protocol. In addition, steps were taken to standardize the way data was collected from research subjects. This included surveying individual participants using the same approach and administering the questionnaire in the same manner.
Chapter 4: Research Findings and Analysis

Introduction

This chapter describes the emerged themes and related categories based on the interview transcripts, which are clustered and summarized in Table 2 of this document. Participants in this research study shared their perspectives about the embedded-level format and its effect on students’ writing skills and their own teaching practices. In compliance with the Informed Consent document, participants of this research study will remain anonymous. Identifying information that could be linked to participants’ names and professional statuses are not included in this thesis paper. Therefore, the pseudonyms Olivia and Oliver will be used to represent the research participants.

Research Participant Profiles

Participant 1: Olivia.

At the time of this writing, it was Olivia’s fourth year as a supplemental instructor of embedded courses at MxCC, and first year as an adjunct instructor teaching an English 101 embedded course (English 101E). Olivia taught English 101E within a cohort study design geared for 20 to 24 students; however, Olivia’s actual class size consisted of only 14 learners. The cohort program, on the community college level, was established to track the performance of full-time, first-year students. Olivia’s position as supplemental instructor, started with the passage of Connecticut Public Act 12-40, which includes the following description: “Not later than the start of the fall semester of 2014 and for each semester thereafter, no public institution of higher education shall offer any remedial support, including remedial courses, that is not embedded with the corresponding entry level course, as required pursuant to subsection (b) of this section, or offered as part of an intensive college readiness program, except such institution
may offer a student a maximum of one semester of remedial support that is not embedded, provided (1) such support is intended to advance such student toward earning a degree, and (2) the program of remedial support is approved by the Board of Regents for Higher Education.” In compliance with Public Act 12-40, Olivia provided academic support to community college students who were not ready for college-level English 101. Olivia explained her role in this manner: “...my role at Middlesex Community College was created because of PA 12-40...I am a staff member whose role was designed to support students in embedded courses, and I happen to be teaching this semester as an adjunct, a 101E [English 101-Embedded] section. I have a lot of experience as a staff member and as a teaching faculty...so I might end up talking about my experiences in both roles.” As an instructor of English 101E, Olivia addressed students’ individual learning needs and helped students fill gaps in English grammar and writing. Students taking English 101E also received help from Olivia’s two classroom assistants, who were MxCC students. These students successfully completed the requirements for the embedded English course, traditional English 101, and subsequently became classroom assistants and tutors.

**Participant 2: Oliver.**

Oliver is an Associate Professor of English at MxCC with 13-years of part-time and full-time teaching experience. Oliver has substantial experience teaching embedded-ALP English courses and hiring student-tutors for the embedded-level courses. In addition, Oliver had the opportunity to participate in the piloting of the embedded courses at MxCC, which started in 2014. Oliver was quite passionate about his faculty responsibility; he enthusiastically stated “I am lucky; I love my job.” Oliver reflected on his teaching experience and the embedded/ALP classes: “The version of the one I have taught is part of the ALP program, it came out of Baltimore, the Accelerated Learning Program, where students with lower developmental scores
are grouped with the regular English 101 classes...half of the students are, I hate to use the term regular, but they scored high enough to be in a traditional English 101 and the other half are the students who score a little bit lower. The ALP model, which we have two models, is the only one I have taught, the one I subscribe, and I have loved it. I think it is great for the students in the ALP class, even though they are, according to placement scores, coming in with lower skills.

From Oliver perspective, his ALP English classes have increased students’ academic achievement levels and, in turn, he believes ALP students have exceeded their peers’ learning outcomes in the traditional English 101 course. Oliver had this to say about his observation: “In terms of achievement milestones, the students in my ALP classes, every semester I have taught, have regularly outperformed their college-level peers, which is heartening. Not that I want any student to do better than any other, but if the student that I have spent more time with and I know are putting in more work, it's nice to see that they are getting the results.” The students taking Oliver’s ALP courses were perceivably more successful than mainstream students due to increased time-on-tasks (i.e., time spent to become familiar with course materials, to practice reading/writing techniques, retain the information, and complete course assignments). Oliver believes that these factors are crucial to passing the embedded/ALP course and proceeding to college-level English 101 within the same semester.

Furthermore, Oliver is an advocate for the embedded/ALP English model, and he believes it is an effective instructional method to fast-track developmental reading and writing. Oliver conducts presentations for colleagues to raise awareness of the positive effects of embedded/ALP courses on students’ learning outcomes. He has promoted embedded/ALP English courses at community college conferences and other meetings. For the past two years, Oliver has met with colleagues at the Two-Year College English Association (TYCA)
Conference and given presentations on the embedded/ALP topic. Oliver indicated that some TYCA attendees are not familiar with the embedded/ALP model; however, after hearing Oliver’s talk, some conference attendees are interested in getting information on how to implement this model at their institutions. Oliver explained why he promoted the embedded/ALP sequence: "It's just making people aware that there are other options than the traditional remedial courses. A student must take a developmental course, pass that course, and then start the college-level course. I think more awareness is the key.” In the literature, this sentiment is shared by CCBC and other community colleges that have adopted the ALP concept. Additionally, the Conference on Acceleration in Developmental Education (CADE), in part, promotes awareness of ALP as well.

**Overview of Emergent Themes**

The respondents’ verbatim transcripts were analyzed using Ricoeur’s phenomenological-hermeneutics approach. This method focuses on interpreting the interviewee’s verbatim transcripts, building an understanding of the texts, and connecting the themes within the transcripts. In this research study, themes were identified by reading participants’ transcripts and noting reoccurring code references. An examination of these transcripts generated five (5) emergent themes that captured the essence of the interviewees’ first-hand experiences teaching embedded-level courses at MxCC: 1) college readiness levels; 2) engaged time; 3) personalized learning support; 4) instructional practices and learning activities, and 5) minor challenges and concerns. A cluster of these themes, along with corresponding transcript annotations, are listed below in Table 1.
Discussion of the Findings  

Theme 1: College Readiness Levels.

The statewide college readiness initiative is a major focus of Connecticut’s Public Act 12-40. It offers underprepared community college students the chance to get-ready for postsecondary coursework through one or multiple college readiness levels. For example, students who do not possess the academic knowledge to pass college-level English 101 may take embedded courses (not to exceed one semester) that help learners develop the skill-sets needed to master a traditional English 101 course. From the interviewees’ perspectives, most incoming community college students need some form of remediation in basic reading and writing to be successful in English 101. In view of this, MxCC requires first-year students to take a standardized assessment, such as the student-centered Accuplacer test, to evaluate students’ skill levels in math, reading, and writing. Accuplacer, which is a College Board integrated system computer-adaptive test, is used at most U.S. community colleges to assess the academic ability of new student enrollees. Moreover, the Accuplacer is based on a grading scale of 20 – 120 points. The grading scale defines whether newly enrolled students need remediation in English or whether students are academically ready to be placed into a regular English 101 course. Oliver explained Accuplacer testing in this manner “...We use the Accuplacer to determine where students are placed and we have levels if they placed slightly below the college-level scores.” On the national level, there are five standardized testing programs that can be administered by postsecondary advisors to determine whether students need remediation in reading and writing. The five assessments are the ACT and SAT admissions tests, the Accuplacer test, Asset and Compass placement assessments (Fields & Westat, 2012).
At Connecticut community colleges, the Accuplacer test is directed to freshmen who have not scored at the college readiness level on the SAT or ACT. College readiness levels are determined by placement cutoff scores. In turn, cutoff scores identify the English course where the new enrollee will begin in the placement sequence. ACT/SAT placement cutoff scores represent the lowest scores on the test that the student can earn to be regarded as college-ready. (See Table 2.) When the Accuplacer test is administered, the Accuplacer placement cutoff scores are used to select the appropriate levels of English courses for academically underprepared students. (See Table 3.) For academically advanced students, who are considered college-ready, they are placed directly into a standard English 101 course. Students who need only minimum remediation, or who have mastered 12th grade English skills, could be enrolled in an embedded-level courses (i.e., English 101E or English 101-ALP). Otherwise, students will most likely be placed in a transitional level English course and/or intensive level English sequence before proceeding to English 101E, English 101ALP, or English 101. (See Figure 1, pg. 90.)

The transitional level is used to accommodate community college students who scored on an eighth-grade academic level, or below, as measured by the Accuplacer test (MxCC, 2017-2018). Students are informed in advanced that the transitional and intensive placement sequences are non-credit, preparatory courses and do not contribute toward any graduate credential. As Oliver mentioned, low-performing students who enter community college on the fifth and sixth grade reading/writing levels are placed in traditional remedial English classes. A large portion of these students never advance to college-level courses that count toward a community college degree or credential.
Olivia reflected on possible reasons why some community college students are placed directly into remedial support courses at the point of entry as oppose to college-level English 101. Olivia had this to say: “I think the biggest thing that I've learned from being in this role is that, it's not necessarily the writing issues, it's the student issue of knowing how to be a student... students will come into these classes because they didn't understand how to comprehend the questions on the placement test and... they might not know how to take notes. Or they might not know how to read a textbook for information and how it's different than reading an article to analyze.” Olivia’s observations suggested that incoming community college students lack understanding of essential academic skills (i.e., reading comprehension, note-taking, analytical techniques, and test-taking practices) required for college coursework. Most likely, these students would begin enrollment in the transitional or intensive college readiness level.

The transitional level consists of fast-track reading, grammar, and writing workshops that cover about 24 to 30 classroom hours. Under this level, MxCC offers several non-credit, accelerated workshops that are designed to strengthen students’ skills in grammar, reading comprehension, vocabulary, and college essay writing (MxCC, 2017-2018). At the end of the transitional level, students are given the opportunity to retake the Accuplacer test to determine whether they are academically ready to advance to an intensive-level course, embedded English 101 course, or college-level English 101 (MxCC, 2017, 2018).

The intensive-level sequence, which is a form of developmental English, is intended for community college students who have scored slightly below the 12th grade academic level. In this circumstance, placement in a college-level English course is not appropriate. Therefore, students are enrolled in the intensive level sequence for one semester whereby students can practice college-level writing, critical reading and writing, and critical thinking. According to
PA 12-40, “...if a public institution of higher education determines, by use of multiple commonly
accepted measures of skill level, that a student is below the skill level required for success in
college level work, the public institution of higher education shall offer such student the
opportunity to participate in an intensive college readiness program before the start of the next
semester. Such student shall complete such intensive college readiness program prior to
receiving embedded remedial support, as provided in subsection (b) of this section. The Board of
Regents for Higher Education, in consultation with Connecticut's P-20 Council and the faculty
advisory committee to the Board of Regents for Higher Education, shall develop options for an
intensive college readiness program. Also, students are encouraged to actively engage in the
learning through workshops, class discussions, lectures, and presentations. Unfortunately, the
intensive-level courses do not satisfy an English course requirement or program elective or count
toward a community college certificate or degree (MxCC, 2017-2018. However, students who
demonstrate academic success in the intensive course will advance to English 101-ALP or
English 101E. According to the interviewees, English 101E and English-ALP consist of non-
credit co-requisite developmental writing coupled with standard English 101 coursework.
Moreover, English 101E focuses on helping students master written communication by
delivering remedial support through supplemental instruction, workshops, tutoring, and more
time on tasks.

For the most part, Oliver stated that he preferred teaching English 101-ALP rather than
the English 101E model. Oliver stated the following: “The version I have taught is part of the
ALP, it came out of Baltimore, the Accelerated Learning Program, where students with lower
developmental scores sit in on the regular [English] 101 classes, as I said, half of the students
are, I hate to use the term regular, but they scored high enough to be in a traditional [English]
101 course and the other half are the students who scored a little bit lower.” Also, Oliver reflected on the students who do not meet requirements to take an embedded course. Oliver shared this thought: “We have students coming in with 5th and 6th grade reading and writing levels. I don’t think an embedded course is right for them because they’re so far removed from college level that they need a standalone traditional remedial class, which is another option we have at our school.” Oliver had more to say, “I don’t think embedded is necessarily for everyone. My perspective of embedded was the idea of putting students who are a little less academically prepared into a college-level course. Lower scores take a traditional developmental course to get them up to even, almost college ready.” Usually, students who fall significantly below the Accuplacer assessment cut-off scores, along with other placement measures, are enrolled in a traditional developmental course to get them “...almost college ready.” In this case, almost college ready suggests that the student will not be academically ready to proceed to college-level English 101 after taking the initial developmental English course. Presumably, these students will have to undergo a series of developmental courses to be considered college ready.

From Oliver’s viewpoint, traditional developmental courses are necessary in some situations due to the influx of underprepared students entering community college with severe learning deficiencies. Research literature suggests that recent high school graduates are entering community college with unresolved issues in English and math that they experienced in secondary school, and, at this point, there are no quick remedial solutions available at the community college level (Bailey, Jeong, & Cho, 2010a; Bettinger et al., 2009; King, McIntosh, & Bell-Ellwanger, 2017).
Theme 2: Academic Engaged Time

Engaged time, or *time-on-task*, is a familiar concept among secondary and postsecondary educators. Most educational researchers have agreed that engaged time is correlated to higher rates of student success (Johns, Crowley, & Guetzloe, 2008, p.2). Similarly, participants of this research study observed that the most effective method to increase student understanding is time-on-task. Research respondents believed that academic success in an embedded-level course is highly dependent upon the amount of time students spent on grammar practice and writing activities. The time-on-task concept is not a new phenomenon in the daily lives of English instructors; nevertheless, it is one of the main design elements of the embedded course model, and it is a crucial link to successful writing habits. According to research participants, students enrolled in embedded-ALP English courses are instructed to engage in meaningful learning activities through guided and independent practices. Olivia indicated that an embedded English class “…shows the importance of emphasizing and using class time to spend time writing…and then, using that writing to be the source of practical application.” Olivia mentioned that as an instructor, she would always have students do writing assignments during class. She indicated that the embedded format has given her “…the ability to realize, you need to have this class time where students should be working on their writing. But how can we take advantage of that and use that as teachable moments and use that as something that could be a lesson on parallel structure or on grammar. Something small, but so that way it connects back to what the students are actually doing, so that they see right away, wait a minute, I know how this can be used in my actual writing and now I can keep going and apply that in the future.” In Olivia and Oliver’s embedded English courses, students spend extra time involved with practical projects, such as brainstorming, creating outlines and drafts, revising drafts, tutoring sessions, and working on
grammar lessons and homework assignments. Considering these activities, Oliver stated “I had some ALP students say to me, after they got their first essays back...wouldn’t this be good for everybody to do? If every single student spent an extra hour and 16 minutes doing homework, discussing things, going to professor's office hours, going to tutoring, every single student would do better.” Apparently, Oliver’s plan is to keep students actively engaged through multiple learning activities.

Engaged time is most effective with instructional time, the time instructors spend providing active teaching, and academic learning time, which integrates student engagement and student success (Johns, Crowley, & Guetzloe, 2008, p. 2). From the interviewees’ perspectives, the embedded-level English course is geared to allow extra instructional time, promote student engagement and student achievement. Olivia stated that the embedded-level course “…gives teachers time to take a step back and go over things that you would not be able to do in a regular English course.” According to Olivia, “there's a lot of flexibility too that goes into that extra time frame, especially in the accelerated learning classes. So, if there's a class where students are struggling with a certain topic, we can spend that entire class day focusing on that subject.” In addition, Olivia indicated that the embedded English course includes a full-time instructor and a supplemental teacher, who provide collaborative instruction. Olivia had this to say, “…we do our best to include a supplemental instructor. Basically, an in-class tutor. We have one full-time professional staff member who helps out in as many classes as she can.” Olivia recognized that in terms of instructional time, offering extra teaching and learning support on the community college level is expensive. Nevertheless, she believes that embedded English courses are worth the investment because it provides time for teachers to personalize learning support and fill learning gaps for a diverse group of underprepared students.
Theme 3: Personalized Learning Support

Personalized instruction is another longstanding educational practice that has the potential to improve the achievement of underprepared community college students. In most cases, the personalized instructional approach is tailored based on students’ individual needs, and students work at their own pace. According to the interviewees, embedded-level English courses incorporate personalized learning support. Olivia had this to say: “it’s a chance for you [student] to meet with your instructor, to have a second set of eyes and some sort of supplemental instructor or classroom assistant help you...every session is going to be personalized to what you need, what the class needs and to help you succeed.” Furthermore, personalized learning provides flexibility in what academic support is required by students and when, in terms of time, students are ready to grasp and process concepts. In view of this, Olivia suggested that some students may need more time beyond the regular scheduled embedded class to absorb certain aspects of grammar and writing to gain proficiency. For example, Olivia shared this account: “...there was a student that I worked with who had a brain injury from a car accident and it effected his memory, so it took him a long time to get through our developmental classes. He took [English] 101E and didn't pass and then he took an [English 101] ALP class and he just passed.” Olivia continued with the following: “…for some students, depending on what level of deficiency they have or what the circumstances are, it might benefit them to take an embedded course more than once. For some students, an embedded class might not get them to the skill level that they need to demonstrate proficiency or to be able to pass the course. But I think in those circumstances, depending on the student's persistence, they can take the class again and work on those skills that might lead to meeting the outcomes and passing the course.” Of course, retaking an embedded English course on the community college level could be both expensive
and time-consuming for stakeholders; however, in some circumstances, as Olivia suggested, this approach is reasonable.

**Theme 4: Instructional Practices and Learning Activities**

The participants in this research study identified several instructional methods and activities that they believed guided student involvement and improved student learning outcomes. The research respondents were most interested in instructional practices that promoted students’ cognitive skills as well as non-cognitive skills. For instance, Oliver’ used surveys to gather students’ viewpoints and solicit questions from the students. This is not an innovative method, but Oliver found it to be useful in his practice. Oliver described the survey exercise in this way:

“**There's a survey we use on the first day that gets a sense of the student's perception of the class and the student's perception of themselves...I think it's nice because in the embedded class we really do try to focus on non-cognitive issues as well.**” Also, Oliver increases student participation by asking each student to come up with one or more questions about the class, college, or other topics. If they do not have any questions, Oliver has a response; he stated this “**... students can ask me what is my favorite movie or discuss one thing that they took away from the first class.**” Oliver suggested that this dialogue exercise encourages students to consciously reflect on their own learning, and in turn, generate class discussions that build on their personal reflections. **That tends to work well and then actually get some good discussion going.**” said Oliver. “**It gives students, who are otherwise more reticent to speak, a chance to ask questions and feel comfortable in that environment.**” In some learning settings, dialogue exercises could increase students’ comfort level and maximize their learning potential. Also, trying to get to know students might increase student engagement and participation.
Oliver indicated that he takes time to get to know his students through individual conversations and class discussions. Oliver suggested “…talking to students about obstacles, cheerleading them if that’s what they need, giving them a little bit more of a kick in the butt if that's what they need. We tend to get to know the students a lot better because, 1) we're with them twice as long as a traditional student and, 2) the student to teacher ratio is much smaller. So, you really get to know the class, know the students in it.” Another instructional practice that interested the research participants was the use of the interactive writing workshop.

Versions of the workshop model have been used on the secondary school level, which included the fundamentals of the writing process: prewriting, drafting, revising and editing written texts (Jasmine, & Weiner, 2007). On the postsecondary level, Olivia observed that the workshop model was “…structured in a way that's similar to creative writing classes.” Students are directed to practice English grammar, construct outlines and drafts, and edit their own writings. Likewise, Oliver recognized that embedded courses are often delivered as workshops: “…the embedded/ALP, some of it, is more like a workshop, far more like a workshop than a lecture or anything... you don't just sit down and write a paper. You brainstorm, and then you outline, and then you draft, and then you revise that draft.” Overall, the workshop model is a regimented method of teaching essential writing skills. It is one of many instructional activities designed to help students reach learning goals.

Oliver pointed-out that he focuses on the learning goals of the activity prior to teaching the course material. Oliver explained his experience using this example: “The other instructional technique that I use mostly is just looking at backwards design. I look at the essay that we need to complete and figure what steps do I need to design backwards from that product. What do I need to do to get students there?” Oliver was referring to the pedagogical
principle of *Backwards Design*, which is the process of identifying learning goals of the course, and then determining what the student is expected to achieve from the learning activities. In Oliver’s experience, *Backward Design* contributed to positive student learning results and helped most students meet expected competences. However, the *Backward Design* model is not a new-fangled teaching framework. It was introduced by Wiggins and McTighe in 1989, and used on the secondary and postsecondary levels to support pedagogical instruction and student understanding. The initial step of Backward Design is to identify the preferred course goals, then identify assessments to validate learning, and the last step is to plan the learning instruction (Graff, Nelson, 201; Michael & Libarkin, 2016).

**Theme 5: Minor Challenges and Concerns**

From the interviewees’ perspectives, there have been no major challenges related to facilitating embedded courses at MxCC. They explained that facilitating embedded-level courses has not been problematic in their personal experiences. However, during the onset of implementation of the embedded courses, the interviewees had a few concerns about what would happen once the embedded courses were underway. For example, Olivia was concerned about helping students build awareness of the new embedded courses. Olivia was interested in “…making sure that it's clear to students or potentially parents, what embedded courses actually mean and how they're actually running.” Olivia suggested that students should “…be able to explain in their own words what the class was and how it helped them.” For example, Olivia shared this reflection: “One of the instructors here [MxCC] has students in his ALP sections write a letter to future students in ALP sections. He uses it on the first day of class or in their syllabus, so students understand that we're not trying to waste their time, we're not trying to have you spend all this time doing extra work. It's [the embedded course] designed to help you
achieve and designed to fit the personal needs of the class. This isn't an extra half hour of having to learn extra content than a regular 101 course. It's an extra half hour for you to be in a computer lab, working on your content and making sure that we are addressing your individual needs.”

In addition, Oliver was uncertain about the level of support from the administration and changes mandated by Public Act 12-40, an Act Concerning College Readiness and Completion. Public Act 12-40 mandated a major revamp of developmental education and the delivery of new college readiness courses in English and mathematics. Initially, this legislative act was not fully embraced by participants in this research study. Oliver had this to say “… we started thinking about this [embedded/ALP] course because of state law Public Act 12-40 in Connecticut that required us to drastically overhaul the way we offered remedial education, developmental education, and, I think it's fair to say that not just I, but almost across the gamut, pretty much all my colleagues were really frustrated by PA 12-40. We didn't like this sort of top-down mandate by people who weren't educators suddenly saying, "You need to change how you do things… In retrospect, I look at it as, the way they went about it, and I still have my problems with some of it, but the fact that it gave us the impetus to try something new and investigate this ALP model really ended up being wonderful. ”

Also, Oliver had concerns about how MxCC administration would support faculty and how small class sizes would impact faculty members’ salaries. Oliver had this to say: “The main challenge we anticipated was perhaps the administration supporting it [PA 12-40] because it is giving a full-time instructor a course with only 12 students in it. So, they are not making as much money as they potential could if it had a classroom of 25.” Despite these concerns, Oliver was pleased with the support that he received from his administration: “Our particular administration
has been supportive. I think that because Connecticut changed everything and ran this ALP model as a trial to see how it goes, and the data has sort of spoken for itself. It's been working. The students in the class retained longer, they succeed through the next level of courses, they move faster than, especially through our old, traditional model. I'm lucky there hasn't really been too many challenges”. These sentiments were shared by Olivia as well.

Olivia agreed that students in the embedded-level courses retained information longer and they succeeded through the next level of English sequences faster than they did through MxCC’s traditional developmental model. She said "...as far as teaching goes, I think that embedded courses do a very good job with helping to resolve or at least providing the opportunity for students to resolve their skill deficiencies.” Nevertheless, Olivia observed that embedded-level courses are not suitable for all incoming community college students, particularly students with severe learning deficiencies in reading/writing. She recognized that embedded-level courses may not help some students reach desired proficiency-levels or pass the courses. “I think in those circumstances, depending on the student's persistence, they can take the class again and work on skills that might lead to meeting the outcomes and passing the course.” With these situations in mind, Oliver and Olivia approve of the embedded/ALP courses; however, they are in favor of maintaining traditional developmental courses for students who need a high level of academic support.
Chapter 5: Research Findings and Relevance to Literature

Introduction

An examination of the respondents’ verbatim transcripts generated five emergent themes that captured the interviewees’ first-hand experiences teaching embedded-level English courses. The research participants discussed statewide college readiness levels, student engaged time-on-task, personalized learning support, instructional practices, and minor challenges and concerns. Overall, these themes revealed that the participants in this research study perceived that the statewide college readiness initiative and embedded/ALP courses are appropriate for strengthening students’ understanding of English grammar and basic writing. The college readiness initiative offers community college students the chance to get-ready for postsecondary coursework through one or more college readiness courses. Students who do not possess the academic skills to pass college-level English 101 may take embedded courses, or other college readiness sequences, to help develop the necessary tools to successfully complete standard English 101.

Furthermore, the embedded course is a starting point for students to gain college credits that can be used toward a community college degree or credential. However, research participants suggested that the embedded/ALP English courses are not geared for all underprepared students, particularly those who enter community college with severe deficiencies in reading and writing skills. According to the study participants, these students should be placed in traditional developmental courses until they are “almost college ready.” These findings are relevant to the expanding body of research literature intended to inform community college deans and faculty members about best practices in teaching embedded/ALP levels and the influence of embedded/ALP courses on student outcomes.
Findings Related to the Literature

College Readiness

The participants, particularly Oliver, took a strong stance on the fact that embedded-level courses are not geared for all underprepared college students. He suggested that traditional developmental/remedial courses should continue for students with severe learning problems. Oliver mentioned that some students enter community college testing-in at fifth and sixth grade reading/writing levels and will have difficulties catching up to college-level material. In the literature, researchers argued similar points, indicating that integrated courses will not support underprepared students who have quantifiable academic gaps in basic reading and writing (Attewell, Lavin, Domina, Levey, 2006). Researchers advised that students who have higher rates of failure in embedded courses would limit their chances to complete prerequisites and impede advancement to credit-bearing English 101 (Bahr, 2010; Gunn, 2011; Morrison et al., 2007; Shulock, & Koester, 2014). Oliver’s opinions are resonated in the research literature. According to McCurrie (2009), in some cases, academic remediation in English and mathematics were provided too late in the students’ learning situations to have a positive impact on their progress in college-level courses. Researchers in the literature argued that rudimentary reading and writing should have been taught in secondary school to make a difference on the college level (Parker, Bustillos, & Behringer, 2010). The preferred approach is to teach basic English language skills in secondary education. Another method is to align high school and postsecondary English curriculum and assessment to ensure that secondary students acquire the academic skills to succeed in college-level courses (Bailey, Jeong, & Cho, 2010b; Bettinger et al., 2009).
Engaged Time

Engaged time, or time-on-task, has been linked to higher rates of student success, and it is most effective when used with instructional time (Johns, Crowley, & Guetzloe, 2008). Research participants observed that time-on-task and instructional time increased community college students’ academic success. For example, passing an embedded English course depends upon the amount of time students spend practicing grammar and writing lessons, and involved with brainstorming, creating outlines and drafts, revising drafts, and doing homework. According to the literature, active participation and engaged time-on-task are reasonable predictors of better grades and course completion (Miyamoto, Coleman, Williams, Whitehill, Nesterko, & Reich, 2015).

Personalized Learning

Personalized learning is still an on-going movement in secondary and postsecondary educational institutions. According to the literature, personalized learning settings are called adaptable learning environments, which were once designed for disabled secondary students. Presently, embedded/ALP courses, by design, incorporates innovative ways to personalize learning criteria for individual community college students. Embedded courses offer faculty the time to personalize every learning session based on what students need. Presently, there are a growing number of postsecondary faculty, including MXCC, who have customized learning environments to match students learning styles, and/or personal learning paths. Personalizing the learning settings involves analyzing the student to determine how the student functions in the classroom or online setting and how that student interacts with the instructor and peers. The challenge is to select the appropriate physical design that correlates with student achievement. Furthermore, the student and faculty should create a “personal learning path” that incorporates
engaging lessons and activities that interest the learner. (Ignatova, Dagiene, & Kubilinskiene, 2015).

With the aid of a personal computer and Web technologies, the student’s personal learning environment can be set-up on the Website and tracked by faculty and student. Researchers indicate that an example of creating a personalized learning environment is like setting-up a web profile on a social media network. Creating the web profile would involve selecting a name, aviator, video, audio, design template (i.e., color, design, theme), and using multimedia to create personalized learning activities and/or resources (Ignatova, Dagiene Kubilinskiene, 2015).

**Instructional Practices**

Throughout the literature, and relevant to the opinions of the participants, the embedded-level/ALP course is perceived as a flexible instructional strategy for helping students understand English grammar and writing techniques. It is geared for teaching and reinforcing literacy basics, reflective writing, essay writing, critical thinking, and more (Gunn, 2011; Salamonson, Koch, Weaver, Everett, & Jackson, 2010). Researchers have emphasized that the embedded level course provides levels of academic support and allows extra time for guided instruction and student-instructor collaboration (Johns, Crowley, & Guetzloe, 2008).

In the literature, and among the research participants, the embedded and ALP courses are perceived as favorable options for most underprepared community college students (ConnSCU Initiatives, 2012; Jenkins, Speroni, Belfield, Jaggars, & Edgecombe, 2010). As the respondents of this study have indicated, the ALP model represents an effective instructional approach. By design, it incorporates wide-ranging instructional support that guides students through college-level English 101, with the aid of a supplementary course that provides remedial writing
guidance (Jenkins, Speroni, Belfield, Jaggars, & Edgecombe, 2010). This instructional support includes filling learning gaps for a diverse group of underprepared students and using flexible interactive teaching methods and assessments to increase student persistence and engagement (Pierce, 2017; Wynants & Dennis, 2018). Two of the most effective instructional methods reported by participants are time-on-task and the workshop model. Researchers have established that time-on-task is correlated to higher rates of student success (Johns, Crowley, & Guetzloe, 2008, p.2). Additionally, the literature supports the workshop model at the secondary and postsecondary levels to help develop students’ writing skills (Jasmine, & Weiner, 2007). In the workshop, students spend time prewriting, drafting, revising, and editing written texts (Forthun, 2018; Jasmine, & Weiner, 2007). Also, the interactive workshops allow students time for engaged practice, instructional feedback, and discussion (Forthun, 2008). Basically, as participants have reported, the embedded courses are delivered as workshops.

**Implications for Practice**

The findings from this study provide pedagogical implications for teaching an embedded English course and supporting underprepared students at a community college. It offers indications for administering appropriate instructional methods, learning activities, and engagement techniques that have the potential to enhance underprepared students’ academic performance. One of the main contributions of this research is that it offers useful practices that research participants perceived as having the most influence in helping community college students acquire competencies to successfully complete the embedded English course and proceed to standard English 101. These practices are as follows:

It is suggested that faculty:

- observe and assess student performance relevant to reading and writing.
• identify and record the features of the embedded/ALP format that contribute to higher student success rates.

• encourage students to spend extra time-on-tasks, particularly editing and rewriting. The research participants and authors in the literature, suggested that engaged time is correlated to higher rates of student success (Johns, Crowley, & Guetzloe, 2008, p.2).

• use surveys to gather students’ perceptions of the class and students’ perceptions of themselves.

• raise the levels of teacher interaction and engagement with students to help fill learning gaps.

• talk to the students often about obstacles that may negatively impact their work and progress.

• establish interactive writing workshops structured in a way that is like creative writing classes. Encourage students to practice English grammar, construct outlines and drafts, and edit their own writings.

• provide frequent and specific feedback to students regarding their writing samples.

• try the Backwards Design concept and determine whether it is beneficial to faculty members and students.

In addition, it is proposed that the administration develop a comprehensive pre-service training program, designed for new teaching faculty, that focuses on evidence-based practices in facilitating embedded English/ALP courses. In some cases, new instructors who are assigned to teach embedded English courses are not fully aware of the techniques required to coach an underprepared student or facilitate an embedded course. Formulating a training program
directed at new English instructors could strengthen their roles in implementing strategies that improve student outcomes.

**Implications for Future Research**

There is a need to address equity as part of developmental education reform to ensure all students, regardless of the learners’ academic profiles, have access to comparable academic instruction and support services. Therefore, it is recommended that future research focus on assessing whether and how the community college addresses equity in terms of curriculum design and instructional practice to ensure that the “most vulnerable” enrollees (i.e., students at-risk of academic failure) receive equal learning opportunities as their peers. In contemporary community colleges, vulnerable learners are most often underprivileged working adults, and minority students (Sense rich, 2014).

Findings from the current research study revealed that vulnerable students, who scored well below the desired Accuplacer cut-off scores (i.e., fifth and sixth grade levels), are typically placed in standalone-traditional, non-credit developmental courses. Apparently, community college students measuring at these grade levels are not being exposed to the latest developmental curriculum as compared to their underperforming peers, who are placed in modern credit-bearing embedded courses. Follow-up with community college deans and faculty would be informative to understand how reformed developmental courses are accessible to vulnerable students.
Conclusion

The purpose of this qualitative research study was to investigate the lived experiences of two well-informed faculty members responsible for teaching embedded-level English courses at MxCC. These participants reflected on their day-to-day work experiences and shared their perspectives on facilitating embedded-level courses. The participants encountered underprepared students who required corrective academic instruction to gain proficiencies in English composition. The findings of this study imply that research participants believe that embedded-level/ALP English courses are well-fitted to strengthen the reading/writing skills of most underprepared students. However, respondents advise that these courses are not appropriately suited for community colleges students who are assessed below the Accuplacer and/or SAT/ACT placement cut-off scores. Considering these measures, participants observed that MxCC’s traditional developmental courses would be more appropriate for these students.

Findings revealed that traditional developmental courses are still offered at MxCC particularly for new community college enrollees with measurable secondary (fifth and sixth grade) reading and writing skills. Apparently, reform of traditional developmental education, mandated by Public Act 12-40, did not eliminate non-credit remedial courses for these learners. The transformation of CSCU’s developmental education courses was in response to the national objectives that called for better academic preparation for the U.S. labor force and an increase in the number of future college graduates. From this reform effort emerged the implementation of embedded/Accelerated Learning Program courses geared for addressing the English and math remediation problems at Connecticut community colleges.

Resolving the remediation problem at postsecondary institutions is significant to U.S. federal and state policymakers as well as community college administrators who are focused on
preparing more knowledgeable people to meet graduation expectations and workforce demands. Also, this problem is highly important to community college faculty in the Department of English, giving that faculty members are responsible for delivering embedded/ALP English courses, along with appropriate instruction and assessment, to a large proportion of underprepared students. Most likely, these students will require personalized learning sessions based on what they need in turns of English remediation. Conversely, new English language faculty may need pre-service training to enhance teaching practice and understand the academic needs of their learners. Moreover, faculty must be prepared to assist students in understanding the magnitude of the embedded course and its overall components, including the literacy fundamentals and college-level English instructions. Students should be aware of what an embedded course represents to perform well in this course. One of the research participants suggested that community college students should be able to define the embedded course and the benefits gained from taking the course.

CSUC community colleges, like most U.S. community colleges, operate under a unique open access strategy and, as a result, these institutions attract and enroll an influx of students who are not academically prepared to handle college coursework. State policymakers and postsecondary administrators are familiar with this long-standing situation; therefore, the leadership should be engaged in collaborative planning to identify innovative and equitable developmental approaches that benefit all community college students, regardless of their academic skill levels. This massive challenge requires an array of support from the CSUC stakeholders (i.e., state and postsecondary policymakers, community college deans, faculty and students) to help students achieve the academic skills essential for college-level coursework and degree attainment.
References


Scott-Clayton, J., & Rodriguez, O. (2015). Development, discouragement, or diversion? New evidence on the effects of college remediation policy, 10(1), 4-45. DOI: 10.1162/EDFP_a_00150


## Appendix A

### Themes

Table 1

*Themes Based on Respondents’ Transcripts*

<table>
<thead>
<tr>
<th>Emergent themes</th>
<th>Sub-themes and transcript excerpts</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. College readiness levels</td>
<td>1.1 Placement levels</td>
</tr>
<tr>
<td></td>
<td>“…we use the ACT [Accuplacer Testing] placer to determine where students are placed and we have levels if they placed slightly below the college-level scores. They have options to take embedded classes. The version of the one I have taught is part of the ALP program, it came out of Baltimore, the Accelerated Learning Program, where students with lower developmental scores sit in on the regular 101 classes… half of the students are, I hate to use the term regular, but they scored high enough to be in a traditional 101 and the other half are the students who score a little bit lower.”</td>
</tr>
<tr>
<td></td>
<td>“We have students coming in with 5th and 6th grade reading and writing level. I don't think an embedded course is right for them because they're so far removed from college level that they need a standalone traditional remedial class, which is another option we have at our school.”</td>
</tr>
<tr>
<td></td>
<td>“I don't think Embedded is necessarily for everyone. My perspective of embedded was the idea of putting students who are a little less academically prepared into a college-level course. Lower scores take a standalone traditional developmental course to get them up to even, almost college ready.”</td>
</tr>
<tr>
<td>1. College readiness levels</td>
<td>1.2 Types of embedded courses</td>
</tr>
<tr>
<td></td>
<td>“…we have two types of embedded courses that are designed for students who would have previously, in the old model, tested into a developmental English course.”</td>
</tr>
<tr>
<td></td>
<td>“Embedded, the way I view it, is any class in which students are receiving additional assistance to get through a college-level course. Usually, at least at our school, that is done by a placement test.”</td>
</tr>
<tr>
<td></td>
<td>“…we use the accelerated learning program, which was created by the Community College at Baltimore County, in which half of the students in a 101 class are tested into 101… the other half were tested in what was previously a developmental class…”</td>
</tr>
</tbody>
</table>

...
“…I think that the two biggest cons that people see, especially with the ALP program is, it's time, it's money and because the ALP section is technically a developmental class…”
“…it does sometimes effect students' abilities to take 101 co-requisites. Because they're taking the ALP section, that technically makes them not always eligible for co-requisites; so that's probably the area that we actually have the most push-back with.”
“The ALP, some of it's more like a workshop, far more like a workshop than a lecture or anything…”
"...as far as teaching goes, I think that embedded courses do a very good job with helping to resolve or at least providing the opportunity for students to resolve their skill deficiencies."  

<table>
<thead>
<tr>
<th>1.3 Standalone, traditional developmental course</th>
</tr>
</thead>
<tbody>
<tr>
<td>“The students who have…a few points below…the college level get in the embedded course and students with much lower scores take a standalone, traditional developmental course to get them up to even, almost college ready…”</td>
</tr>
<tr>
<td>“I don't think an embedded course is right for them [first-year community college students] because they're so far removed from college level that they need a standalone traditional remedial class, which is another option we have at our school.”</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>2. Engaged time-on-task</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.1 Student time-on-task</td>
</tr>
<tr>
<td>“The design elements for the ALP class, I'd say the most method honestly is just more time-on-task.”</td>
</tr>
<tr>
<td>“It's a combination of office hours, of tutoring, sometimes just time-on-task…”</td>
</tr>
<tr>
<td>2.2 Instructional time</td>
</tr>
<tr>
<td>“…depends on class size… if you're in a larger room, you might have 24 students in 101E... try to keep class sizes down for these types of embedded courses, which is definitely another advantage for the student ... and another advantage for the instructor because it does give you more time to spend with each student.”</td>
</tr>
<tr>
<td>“…students in the embedded part of it, 12 of them, sit in on the regular 101 and then after that, they follow me or whoever their professor is for a second session of class, which usually meets in a computer lab and they're just getting an extra hour and 16 minutes, two times a week, on college work.</td>
</tr>
<tr>
<td>“…in terms of time. Obviously, money is tricky as well but I do think it's worth the investment because having this extra time with your instructor, gives you the chance to practice things that you normally have to practice on your own.”</td>
</tr>
</tbody>
</table>
“it gives teachers time to take a step back and go over things that you would not be able to do because of time in a regular English course.”

“As far as perception goes, I think that we've seen these embedded courses as a great strategy to help resolve student deficiencies, in that it gives them the extra time and it gives us as instructors extra time to fill in some of those gaps.”

“There's a lot of flexibility too that goes into that extra time frame, especially in the accelerated learning classes. So, if there's a class where students really are struggling with a certain topic, we can spend that entire class day focusing on that subject.”

“...it's one of those things where we try to address what we can but there isn't always enough time to do everything. Because first and foremost, you must focus on the outcomes of the course, which are: be able to write clearly, being able to write effectively, and being able to use research.”

<table>
<thead>
<tr>
<th>3. Personalized learning support</th>
<th>3.1 Individualized support for students</th>
</tr>
</thead>
<tbody>
<tr>
<td>“...the program personalizes achievement in education...it will benefit them. But perhaps, for some students, depending on what level of deficiency they have or what the circumstances are, it might benefit them to take an embedded course more than once.”</td>
<td></td>
</tr>
<tr>
<td>“it's a chance for you [students] to meet with your instructor, to have a second set of eyes and some sort of supplemental instructor or classroom assistant help you...every session is going to be personalized to what you need, what the class needs and to help you succeed.”</td>
<td></td>
</tr>
<tr>
<td>3.2 Understanding student differences</td>
<td></td>
</tr>
<tr>
<td>“…if a different section of students has a totally different issue, or a totally different skill deficiency, we can work on that instead…”</td>
<td></td>
</tr>
<tr>
<td>“…for some students, an embedded class might…not get them to the skill level that they need to demonstrate proficiency or to be able to pass the course. But I think in those circumstances, depending on the student's persistence, they can then take the class again and work on those skills and that might lead to meeting the outcomes and passing the course.”</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>4. Instructional practices and activities</th>
<th>4.1 Backwards design</th>
</tr>
</thead>
<tbody>
<tr>
<td>“The other instructional technique that I use mostly is just looking at backwards design. I look at the essay that we need to complete and figure what steps I need to design backwards from that product. What do I need to do to get students there?”</td>
<td></td>
</tr>
<tr>
<td>4.2 Writing workshops</td>
<td></td>
</tr>
</tbody>
</table>
“...use time for writing workshops...it is structured in a way that's similar to creative writing classes...”

“you don't just sit down and write a paper. You actually do brainstorm, and then you outline, and then you draft, and then you actually revise that draft...”

In ALP, that's what we're going to work on together. We're going to spend one day brainstorming. We're going to spend another day working on outlines. We're going to go over drafts together, we're going to workshop, and we're going to edit. It's nice to be able to have time in class to do all that...”

“...we talked about grammar... we talked about parallel structure...we talked about passive versus, active voice... they're getting grammar lessons, which is something that they were probably deficient in...probably why they scored into an embedded class...”

“... they were able to sit down with us and we... read all of their paragraphs and we gave them feedback...they were able to make revisions...”

4.3 Reflection Activities

“... students know when we start class, they have to come up with one question about class or college or anything. ... if they don't have questions then they can ask me what my favorite movie was or one thing that they took away from the first class. It makes them... reflect on what we did in 101 ... That tends to work well and get some good discussion going. It gives students who otherwise reticent to speak a chance to ask questions, feel comfortable in that small environment.”

4.4 Surveys

“I have some material that I share. There's a survey we use on the first day that gets a sense of the student's perception of the class, the student's perception of themselves... I think it's nice because in the embedded class we really do try to focus on non-cognitive issues as well.

4.5 Get to know students

“... talking to students about obstacles, cheerleading them if that's what they need... We tend to get to know the students a lot better because, 1) We're with them twice as long as a traditional student and, 2) The student to teacher ratio is much smaller. So, you really get to know the class, know the students in it.”

4.6 In-class Tutors

“...we do our best to also include a supplemental instructor. Basically, an in-class tutor. We have one full-time professional staff member who helps out in as many classes as she can.”
“it goes from a 1 to 12 ratio to really a 1 to 6 ratio when you've got two people there who are able to help... we can usually, hopefully tackle any writing deficiencies that come up.”

5. Challenges and concerns

5.1 Typical Challenges

“There have been no major challenges.”
“I'm lucky there hasn't really been too many challenges.”

5.2 Student concerns

“...students will come into these classes because they didn't understand how to comprehend the questions on the placement test and that then translates into the class because they might not know how to take notes. Or they might not know how to read a textbook for information and how it's different than reading an article to analyze.”

5.3 Administration Concerns

“The main challenge we anticipated was perhaps the administration supporting it [embedded-Alp instruction].”
“Our particular administration has been supportive. I think that because Connecticut changed everything and ran this ALP model as a trial to see how it goes, and the data has sort of spoken for itself. It's been working. The students in the class retained longer, they succeed through the next level of courses, they move faster than... the traditional model.”

5.4 Legislative mandate as a tool for change

“... we started thinking about this because of a state law PA 12-40 in Connecticut that required us to drastically overhaul the way we offered remedial education, developmental education, and, I think it's fair to say that not just I, but almost across the gamut, pretty much all my colleagues were really frustrated by that. We didn't like this sort of top-down mandate by people who weren't educators suddenly saying, "You need to change how you do things."
“In retrospect, I look at it as, the way they went about it, and I still have my problems with some of it, but the fact that it gave us the impetus to try something new and investigate this ALP model really ended up being wonderful.”
“Looking back, I would have changed the ALP model years ago with or without a state law. It's great, I couldn't recommend it more.
Appendix B
ACT/SAT Cutoff Scores

Table 2

*ACT/SAT - Placement Cutoff Scores (MxCC, 2016)*

<table>
<thead>
<tr>
<th>Placement in an English course:</th>
<th>Old SAT Score</th>
<th>New SAT Score</th>
<th>ACT Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG 063/ English 101-ALP (Accelerated Learning Program) or ENG 101E (English 101 with embedded support)</td>
<td>450 - 499</td>
<td>24.5 - 26.5</td>
<td></td>
</tr>
<tr>
<td>English 101</td>
<td>500 or higher</td>
<td>27 or higher</td>
<td>Reading 20 or higher or English/Reading /combined 47 or higher</td>
</tr>
</tbody>
</table>
Appendix C

Accuplacer Cut-off Scores

Table 3

*Accuplacer - Placement Cutoff Scores (MxCC, 2016)*

<table>
<thead>
<tr>
<th>Level</th>
<th>Rules</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transitional Level</td>
<td>Placement Rule 1: Sentence Skills &lt;56, and Reading Comprehension &lt;56</td>
</tr>
<tr>
<td>Transitional Level</td>
<td>Placement Rule 2: Sentence Skills &lt;56, <strong>OR</strong></td>
</tr>
<tr>
<td>Workshop/Fast Track English</td>
<td>Placement Rule 3: Reading Comprehension &lt;56</td>
</tr>
<tr>
<td>(Strongly recommended)</td>
<td></td>
</tr>
<tr>
<td>Intensive Level English 096</td>
<td>Placement Rule 1: Sentence Skills &gt;57 - &lt;57</td>
</tr>
<tr>
<td></td>
<td>Reading Comprehension &lt;71</td>
</tr>
<tr>
<td></td>
<td>Placement Rule 2: Sentence Skills &lt;57 - &lt;71, and Reading Comprehension &gt;57 <strong>OR</strong></td>
</tr>
<tr>
<td></td>
<td>Placement Rule 3: Sentence Skills &gt;57 - &lt;71, and Reading Comprehension &lt;57 - &lt;71</td>
</tr>
<tr>
<td>Embedded Level: English 009A</td>
<td>Placement Rule 1: Sentence Skills &gt;72- &lt;72</td>
</tr>
<tr>
<td>English 101-ALP</td>
<td>Reading Comprehension &lt;82</td>
</tr>
<tr>
<td></td>
<td>Placement Rule 2: Sentence Skills &lt;72 - &lt;87, and Reading Comprehension &gt;72 <strong>OR</strong></td>
</tr>
<tr>
<td></td>
<td>Placement Rule 3: Sentence Skills &lt;72 - &lt;87 and &lt;72 Reading Comprehension &lt;82</td>
</tr>
<tr>
<td>Embedded-Level: English 101E</td>
<td>Sentence Skills &lt;83 - &lt;87, and Reading Comprehension &gt;83</td>
</tr>
<tr>
<td>College-level: English 101</td>
<td>Sentence Skills &gt;88, and Reading Comprehension &gt;83</td>
</tr>
</tbody>
</table>
Appendix D

Mxcc English Placement Sequence

Figure 1. Mxcc English placement sequence by college readiness level (MxCC, 2017)
Appendix E

Notification of IRB Approval

NOTIFICATION OF IRB ACTION

Date: December 7, 2017  IRB #: CPS17-10-22
Principal Investigator(s): Kristal Moore Clemons
Glenda Fowler-Cartwright
Department: Doctor of Education Program
College of Professional Studies
Address: 20 Belvidere
Northeastern University
Title of Project: Exploring Faculty Members’ Perspectives on the Use of Embedded English Courses to Enhance Writing Skills of Community College Students
Participating Sites: Middlesex community College approval in file
DHHS Review Category: Expedited #6, #7
Informed Consent: One (1) signed consent form
Monitoring Interval: 12 months

APPROVAL EXPIRATION DATE: DECEMBER 6, 2018

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

Nan C. Regina, Director
Human Subject Research Protection

Northeastern University FWA #4630
Appendix F

MxCC Approved Research Site

November 28, 2017

To: Glenda Fowler-Cartwright

Re: Review of proposed research at Middlesex Community College

Dear Glenda:

I am pleased to report that your research protocol entitled “Exploring Faculty Members’ Perspectives on the Use of Embedded English Courses to Enhance Writing Skills of Community College Student” has been given exempt status by the MxCC Institutional Review Board. This means that it does not require full IRB review and that you may proceed with your research.

I ask that you contact me if your research protocol changes to include more sensitive questions, more onerous tasks or less privacy for your subjects, or any other change that might present ethical issues for participants. The following website can guide you in this respect: https://www.hhs.gov/ohrp/regulations-and-policy/decision-charts/index.html#

Thank you for selecting Middlesex Community College as a site for your research. Please let me know if we can be of any assistance to you in your research.

All the best,

Andrea Levy, PhD, MBe
Chair, Institutional Review Board
Appendix G

Semi-Structured Interview Protocol

Date: ______________________________________________
Time: ______________________________________________
Location: ___________________________________________
Participant #: _______________________________________

NEU Doctoral Student/Researcher: Glendia Fowler-Cartwright

I. Introduction

Thank you for participating in this research study. The purpose of this interview is to
gather your perceptions of your experiences teaching underprepared students enrolled in an
embedded English course. This interview is planned for 60 minutes. With your permission, I
will audio record your responses to interview questions to minimize note-taking. Steps have
been taken to ensure confidentiality and anonymity of your responses through use of abstract
numbers. Paper-based results will be stored in a secured file cabinet, and digital data will be
encrypted and saved on a password-protected electronic file without names or any identifying
information that could be linked to respondents’ names, professional status, or locations.

Before the interview begins, review the consent form(s) with the selected participant.

II. Research Questions

Central Question

1. To what extent, as perceived by teaching faculty, does the embedded course resolve
community college students’ skill-deficiencies in writing?

Sub-questions

2. What design elements of the embedded course do faculty perceive as having the most
influence in helping, or not helping, underprepared students acquire competencies to
successfully complete the course?
3. How do faculty members describe the embedded delivery method and its influence on their general instructional practices?

4. What issues associated with the writing deficiencies of underprepared students do faculty members feel are not being addressed through embedded-level courses.

III. Interviewee Background Questions

a. What is your job title? __________________________

b. How many years have you taught as a part-time and/or full-time instructor in a community college? __________________

c. How many sections of embedded English courses (online or onsite) do you typically teach per semester? ________________

d. Which English courses do you teach online and/or onsite? __________________

e. How many students are typically enrolled in your embedded course(s)? __________

Request Permission to activate the audio recorder.

IV. Semi-structured Interview Questions

1. What does an embedded course mean to you?

2. Tell me about your experience teaching underprepared community college students enrolled in your embedded course.

3. What are your thoughts on promoting the embedded English course as a way to improve student achievement and course completion.

4. What design elements of the embedded course do you perceive as having the most influence in helping underprepared students increase their writing skill?

5. Describe the differences in your instructional practices in an embedded course as compared to a mainstream course that you have taught.

6. What is your perspective on the thought that an embedded-level English course will not benefit some underprepared students due to distinct measurable academic deficiencies.
7. Tell me about major challenges you have experienced that were associated with facilitating an embedded course.

8. What instructional techniques would you share with instructors who are considering teaching an embedded-level course for the first time?

9. Discuss the changes in students’ writing habits and assessment milestones resulting from the embedded-level course.

10. What academic issues associated with students’ writing deficiencies do you feel are not being addressed through embedded-level courses.

Conclude the interview.

Thank you for taking the time to participate in this interview. If you have any additional questions about this research study, please contact me at fowler-cartwright.g@husky.neu.edu or contact the NEU faculty member supervising (Principal Investigator) this project: Dr. Kristal Moore Clemons, Doctor of Education Program, College of Professional Studies, K.Clemons@northeastern.edu.
Appendix H

Recruitment Email Letter

Dear Faculty Member:

My name is Glendia Fowler-Cartwright, and I am working toward completing a Doctor of Education degree at Northeastern University. One major aspect of this doctoral program is to conduct a research study, which I am inviting you to participate. The title of this research study is *Exploring Faculty Members’ Perspectives on the Use of Embedded English Courses to Enhance Writing Skills of Community College Students.*

I would like to interview community college instructors, full-time or part-time, who teach or have taught one or more embedded-level English courses. Instructors who agree to participate in this research study will be asked to undergo a one-on-one interview, about 60-minutes, to discuss their personal perspectives and experiences teaching an embedded English course. The interview will take place at a mutually-agreed location (i.e., physical location, phone, or Internet). Participation in this study is voluntary, and you are free to withdraw from this interview process at any time. Results of your interview will be kept confidential and anonymous. Digital data/recordings will be encrypted and saved on a password-protected digital file without names or any identifying information that could be linked to respondents’ names, professional status, or locations.

If you would like to participate in this study, please confirm your interest by sending me an email at fowler-cartwright.g@husky.neu.edu indicating the time/date that you are available for the interview, and your preferred meeting location. You will receive a $25 Amazon.com eGift card, which will be emailed to you two weeks after the interview process is completed.

At the initial interview, the informed consent document will be read and discussed prior to the start of this meeting. At this time, you will be asked to review and sign the consent form. If you have any questions about this study, please contact me at 203-857-0503, or at fowler-cartwright.g@husky.neu.edu.

Sincerely,

Glendia Fowler-Cartwright
Student Researcher
Appendix I

Informed Consent

Northeastern University, College of Professional Studies, Doctor of Education Program

Name of Investigator: Principal Investigator: Kristal Moore Clemons, Ph.D.,
Student Researcher, Glendia Fowler-Cartwright

Title of Project: Exploring Faculty Members’ Perspectives on the Use of Embedded English Courses to Enhance Writing Skills of Community College Students

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, and the investigator will explain it to you. You may ask the researcher any questions that you have about this study. When you are ready to make a decision, you may tell the investigator if you want to participate or not. You are not required to participate if you do not want to. If you decide to participate, the investigator 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?

You are being invited to participate in this research study because you are an instructor who has experience teaching embedded courses (i.e., Composition with Embedded Support) at a Connecticut community college.

Why is this research study being done?

The purpose of the proposed research study is to gain a better understanding of how community college instructors perceive the embedded-level course and its effect on basic writing skills of community college students. It is the intent of this research study to learn about instructors lived experiences with college-level embedded courses as a means for improving underprepared students’ proficiencies in English writing.

What will I be asked to do?

If you decide to take part in this study, I will ask you to undergo one semi-structured interview consisting of ten open-ended questions geared to initiating conversations and encouraging participants to elaborate on their lived experiences.

Where will this take place and how much of my time will it take?

Participants will be interviewed at a physical location of their choice, or have the option to interview through phone, email, GoToMeeting or Skype. The initial interviews will be set at 60-

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Approved: 12/7/17
Expiration Date: 12/6/18
minutes; there could be 30-minute follow-up interviews, if needed to clarify information, which could be done over the phone or the internet. About three weeks after the initial interview, you will be sent an email to include a copy of the interview transcription for your review and comments.

Will there be any risk or discomfort to me?

There are no foreseeable risks, harms, discomforts or inconveniences to you as a participant of this study.

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 contribute to the emerging body of knowledge focused on best practices and challenges in teaching embedded courses.

Who will see the information about me?

Your part in this study will be confidential. Only the investigators on this research 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.

Results of the interviews will be made anonymous using abstract numbers. Data will be transcribed and analyzed by the researcher. Hard copy data, including signed consent forms, will be stored in a secured file cabinet, and digital data and audio will be encrypted and saved on a password-protected electronic file without names or any identifying information that could be linked to respondents’ names, professional status, or locations.

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

Your participation in this study is voluntary. You may voluntarily withdraw from this study at any time.

Can I stop my participation in this study?

Your participation in this research is 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 withdraw at any time.

Who can I contact if I have questions or problems?

If you have any questions about this research study, please contact me at fowlercartwright.g@husky.neu.edu or contact the NEU faculty member, Principal Investigator, Dr. Kristal Moore Clemons, Doctor of Education Program, College of Professional Studies, K.Clemons@northeastern.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, Mail Stop: S60-177, 360 Huntington Avenue, 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?

Your participation in this study is voluntary. You will not be paid for your participation in this study. However, you will receive a $25 Amazon.com eGift card, which will be emailed to you two weeks after the interview process is completed.

Will it cost me anything to participate?

No, it will not cost you anything to participate in this study.

Is there anything else I need to know?

Glendia Fowler-Cartwright, the student researcher, is an adjunct faculty member in the Computer Information Systems program at a community college in the Connecticut State Colleges & Universities. (The researcher on this project does not work at the selected site.)

I agree to take part in this research.

Signature of person agreeing to take part

Date

Printed name of person above

Signature of person who explained the study to the participant above and obtained consent

Date

Printed name of person above

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Appendix J

NIH (Protecting Human Research Participants) Certificate of Completion

Certificate of Completion

The National Institutes of Health (NIH) Office of Extramural Research certifies that Glendia Fowler-Cartwright successfully completed the NIH Web-based training course “Protecting Human Research Participants”.

Date of completion: 09/02/2017.

Certification Number: 2471459.