Developmental Reading Instructors at California Community Colleges:
What They Know; What They Need to Know More

by

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Developmental Reading Instructors at California Community Colleges:

What They Know; What They Need to Know More

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ABSTRACT

Abundant research chronicles the backgrounds and characteristics of community college students assigned to developmental reading. Many are members of underrepresented groups and first in their families to attend college. English may not be their primary language. Developmental students often struggle with learning disabilities. Nontraditional students are also common. In contrast, very little research examines the backgrounds and training of developmental reading instructors. This quantitative study entailed a two-part survey. The first portion gathered demographic information about the 1,795 developmental reading instructors at the 112 California community colleges; the second involved administration of a standardized instrument developed at the University of Tennessee, the Assessment of Reading Instructional Knowledge-Adults (ARIK-A).

Six analyses sought to determine the existence of significant differences in performance on the assessment instrument according to educational background, primary level of instruction, employment status, and amount of professional development. Two analyses sought to determine whether sense of collegiality and sense of belonging to a professional learning community within the department could be attributed to employment status. The results of the study point to the significant role played by an instructor’s educational background. Other results underscore the need for coherent professional development and for intentional efforts on the part of the institution to promote collective efficacy among the faculty, including a sense of belonging to a professional learning community.

Recommendations are proposed regarding the minimum qualifications for hire, professional development, oversight of the trajectory from initial placement to college-level, and the crucial necessity to stay apprised of current legislation.
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CHAPTER 1—INTRODUCTION

Abundant literature documents the low completion rates of students who launch their college careers bearing the label “underprepared” in reading, writing, and/or math (Brown & Niemi, 2007; Grubb & Gabriner, 2013; Hern, 2010; Rutschow & Schneider, 2012). Reasons for this persistent problem and suggestions about how to limit its magnitude have garnered a great deal of attention. One overarching factor with multiple strands is lack of alignment. Lack of alignment between notions of what constitutes college readiness is one strand. Lack of alignment between college placement tests and subsequent performance in college-level courses is also documented (Kurlaender & Larsen, 2013; Scott-Clayton, 2012). Brown and Niemi (2007) conducted a study in California to investigate content alignment between assessments used at the secondary and postsecondary levels. They concluded that overall, the results indicated high overall alignment, especially in English Language Arts (ELA), a finding that raises the question, “If the tests in ELA are well-aligned across high school and community college systems, then why do so many students require remediation” (Brown & Niemi, 2007, p.116)? Brown and Niemi (2007) note that only 36% of students taking the Grade 11 ELA test in California in 2006 reached the level of proficiency or better, a result that places two-thirds of California 11th graders below proficiency.

The mismatch between high school preparation and the academic demands of college is another fundamental issue (Venezia & Jaeger, 2013; Venezia, Kirst, & Antonio, 2003). This concern is based on discrepant assumptions between secondary and postsecondary instructors about what constitutes college readiness (Venezia & Jaeger, 2013). An ACT (2006) survey of college and secondary school faculty revealed that 89%
of high school teachers believe they had prepared their students well for college, while only 26% of college faculty consider students prepared for college-level work (ACT, 2006; Policy Analysis for California Education, 2012; Venezia & Jaeger, 2013). To further exacerbate the issue, the students who begin in basic skills are often those with the least experience in participating in discussions about ideas, framing an argument, synthesizing different points of view and writing about what they are learning, precisely the skills that college students need to succeed (Rose, 1989). Yet once students are placed into remedial-level classes, known alternatively as basic skills or developmental classes, they frequently encounter teaching practices that Grubb and Gabriner (2013) have labeled “remedial pedagogy” (p. 52), characterized by heavy reliance on reading textbooks that focus on discrete skills taught sequentially without meaningful context (Grubb & Gabriner, 2013; Jenkins & Cho, 2012; Perin, 2011; Perin & Bork, 2010; Rose, 1989). Since between 40% and 80% of community college students require some remediation in some combination of math, reading, and writing, the vast majority of community college students, then, encounter instruction that does not correspond to their academic needs.

Grubb and Gabriner (2013) are careful not to blame classroom instructors directly. Although basic skills students need classroom instruction designed to promote critical thinking and provide guidance in the “discourse of academics” (Rose, 1989, p. 192), basic skills classrooms are largely the domain of instructors who are hired on a part time, or contingent, basis, sometimes just days before the start of classes (Grubb & Gabriner, 2013; Jaeger, 2008; Jenkins & Agamba, 2013). Part-time instructors are paid for class hours only, limiting the time available to design curriculum responsive to student need or pilot new programs. This discrepancy between what is needed and what
is available has dire consequences underscored by the low degree and certificate completion or transfer of students who begin underprepared (California Community College Chancellor's Office [CCCCO], 2015).

The proportion of part-time, non-tenure track faculty at community colleges has steadily climbed in the last few decades as enrollments have surged and budgets have tightened (Cohen & Brawer, 2008; Grubb & Gabriner, 2013). Eagan and Jaeger (2008) claim that addressing this issue must begin with the acknowledgement that a system that depends largely on part-time or contingent faculty is by nature operating at diminished capacity. Grubb and Gabriner (2013) and Cox (2009) point out that quality of instruction at the basic skills level is especially crucial. Students typically arrive on campus with histories of failure and low tolerance for confusion or mistakes, which they likely attribute to their own inadequacy (Cox, 2009; Farrington et al., 2012; Grubb & Gabriner, 2013; Hern, 2012; Hern & Snell, 2013). The result is that the most vulnerable students—those who most stand to benefit from innovative approaches and coherent instruction—are those most likely to encounter instructors who operate at the fringes of the academic community. A report by the Center for Community College Student Engagement (CCCSE) (2014), describes practices at community colleges that place adjunct faculty at the institutional margins: inconsistent access to orientation and professional development; lack of office space; and limited accommodations for meeting with students. The report describes the reciprocal contingent commitment that results:

Just show up every Thursday at five o’clock and deliver a lecture to your class. Give a mid-term and a final exam, and then turn in a grade, and the college will pay you a notably small amount of money. (CCCSE, 2014, p. 3)
Hern and Snell (2013), who have been instrumental in developing the California Acceleration Project (CAP), an initiative developed to redesign math and English basic skills programs at California community colleges, claim that faculty and students alike need support to operate most effectively. They need sample activities; they need colleagues with whom to collaborate and commiserate; they need community (Hern & Snell, 2013). In fact the CCCSE report (2014) draws parallels between the practice of effectively engaging community college students and faculty. Both need the clear articulation of high expectations accompanied by the training and support to meet those expectations (CCCSE, 2014).

Although open-access, public two-year institutions accept any student over the age of 18, issues of race and class pervade discussion about community colleges (Carnevale & Strohl, 2011; Cohen & Brawer, 2008; Dougherty & Kienzl, 2006). Surging enrollments at public community colleges over the last decade are attributed mostly to low-income students from underrepresented populations (Garcia, 2010; Kurlaender & Larsen, 2013; Malcom-Piqueux et al., 2012). In fact, 44% of low-income students attend a community college as their first institution after high school as opposed to 15% of their higher-income peers (Bailey, Jeong, & Cho, 2010). This discontinuity between student populations raises issues about equity and underscores the urgency to improve outcomes for community college students, who look to college as the path to financial stability. While student populations have changed radically in the last few decades, developmental program redesigns have been generally conservative, since more extreme changes would entail structural, curricular, and pedagogical changes that are difficult to scale (Edgecombe, Jaggars, Xu, & Barragan, 2014). As Cox (2009) suggests, it may be more
appropriate to turn on its head the common notion that students are unprepared for college; perhaps the onus of responsibility should be placed on the colleges. Based on the dismal rates of completion, especially for students who begin in developmental classes, the colleges appear unprepared to meet the needs of many of the students who attribute their presence to a desire to advance their educations and secure family-sustaining jobs. Unlike K-12 students, community college students enroll by choice. However, they are more likely to drop out than complete.

**Statement of the Problem**

The fundamental issue at stake is whether community college basic skills reading and English instructors are sufficiently prepared to effectively design and deliver effective reading instruction to adult students. Perin (1999) contends: “Designing effective instruction requires that teachers have detailed understanding of the cognitive, affective, and social processes that inform adult literacy instruction (p. 611). Perin (1999) suggests that all developmental instructors should be hired full-time to ensure they have the support and resources necessary to detect students’ patterns of strength and weakness and provide meaningful, challenging instruction that leads to demonstrable improvement. Perin (1999), like other scholars (Grubb & Gabriner, 2013), points out that adult literacy instruction is one of the most demanding areas of education, since adult students function competently in some areas but display large gaps in knowledge and skills that undermine their ability to succeed in both school and the labor market.

As demanding as it is to design effective reading instruction for adults, it is perhaps ironic to note the limited evidence that exists to assess the effectiveness of adult reading instruction (Bell, McCallum, Ziegler, Davis, & Coleman, 2013; Perin, 2013;
Smith, 2010; Rutschow & Schneider, 2012). Whereas quality of instruction in K-12 is linked to student achievement on standardized tests, no such measures exist to assess outcomes in developmental education classes. Once students are placed in a remedial sequence based most often on the results of one placement instrument upon enrollment, their progress in mastering math, reading, or writing skills is assumed if they pass one class and enroll in the subsequent class. Since teachers often have wide latitude in designing their courses based on skeletal course outlines, proficiency—or even growth—in using reading strategies, synthesizing multiple texts, or responding critically to ideas within texts is not known, since these skills are not assessed in a standardized format at the end of the semester. Yet as crucial as literacy skills are to student success, only cursory attention has been paid by researchers to actual classroom instructor practice and pedagogy (Rutschow & Schneider, 2012). Rutschow and Schneider (2012) point to the results of several studies to underscore their contention that quality of instruction and classroom experiences are crucial contributors to developmental students’ academic performance. They and Perin (2013) suggest that the field is ripe for the identification of specific effective instructional practices in developmental classrooms that promote attainment of college-level reading skills (Perin, 2013; Rutschow & Schneider, 2012). Rutschow and Schneider (2012) also suggest that the development of a standardized classroom observation instrument and standardized measures for assessing the effectiveness of various classroom practices would add to the understanding of effective instruction.

Meanwhile, some promising practices have been identified, most of which fall into the category that Perin (2013) describes as meaning-making—constructivist
approaches that draw on both reading and writing to focus on critical thinking and problem-solving using authentic materials, rather than reliance on reading textbooks. Yet designing curriculum that varies from business-as-usual requires context to support the substantial structural, curricular, and pedagogical changes entailed in such change (Edgecombe et al., 2014). Chabot College, one of the 112 California Community Colleges, has invested almost two decades in reforms that accelerate students who place in developmental English. Students at Chabot can choose to enroll in a one-semester accelerated course or a two-semester developmental English course. Both combine reading and writing, eschew stand-alone sentence structure, grammar, and punctuation instruction, and require that students wrestle with complex full-length texts that reflect the text they will encounter once they move beyond developmental level offerings (Edgecombe et al., 2014).

A quantitative analysis that employed data from first-time students who entered Chabot between summer 1999 and fall 2010 left “little doubt” that enrollment in the accelerated one-semester course was associated with better short-, medium-, and long-term academic outcomes over five years, even for ESL students with lower placement scores (Edgecombe et al., 2014, p. 13). The Chabot model evolved into CAP, which now encompasses 47 California community colleges in a Community of Practice. A report issued by the Research and Planning Group (2014) for California Community Colleges (2014) attributes the success of CAP to many factors, including a reduction of exit points that historically contribute to sequence attrition. Moreover, Edgecombe and colleagues (2014) conclude that the combination of qualitative and quantitative analyses suggests
that the accelerated option has advantages for all students, though the benefits were most marked for students with higher English and reading placement scores.

The question still remains: What occurs inside those accelerated classrooms that propels students successfully into college-level English and reading? Who are these instructors and what do they know?

Lee Shulman (1986) distinguishes three categories of content knowledge needed for effective instruction. First is knowledge of the subject area (Shulman, 1986). Developmental reading teachers, for example, require knowledge about text, about what a text says, how a text is crafted, what it means to cite evidence from a text, and how to discuss text (Fisher & Frey, 2014). Essentially, an effective reading teacher must have personal experience at wrestling with difficult concepts, synthesizing ideas in multiple texts, and must understand the strategies that he or she has internalized to repair misunderstandings. In other words, a reading instructor must possess an intimate understanding and familiarity with the processes involved in making meaning from text in order to convince students that these processes are worth knowing and utilizing, both in theory and practice (Shulman, 1986). The second category of content knowledge described by Shulman (1986) is pedagogical content knowledge (PCK); PCK goes beyond knowledge of subject matter to the dimension of subject matter knowledge for teaching. PCK includes instructor understanding of what makes learning about a topic, in this case reading, easy or complicated: the conceptions and preconceptions that students of different ages and backgrounds bring into the classroom and knowledge of the strategies useful in reorganizing students’ misconceptions (Shulman, 1986). In developmental classrooms, PCK also involves strategies that promote confidence, since
fear of failure undermines progress (Cox, 2009). The third category of content knowledge described by Shulman (1986) is curricular knowledge, which he colorfully characterizes as the “pharmacopeia” of teaching (p. 10). This includes familiarity with the variety of materials available to exemplify what is being taught and remediate misunderstanding (Shulman, 1986).

In order to identify the most effective instructional practices for teaching reading to adults, the National Institute for Literacy (NIFL) and the National Center for the Study of Adult Learning and Literacy (NCSALL) convened the Reading Research Working Group (RRWG) in the early 2000s. The charge was to identify, assess, and prioritize empirical studies on adult reading instruction and develop a compendium of principles and best practices (Bell, Ziegler, & McCallum, 2004). Research evaluated by the RRGW focused on four key areas of reading instruction for adults: (a) alphabolics, the process of using letters in an alphabet to represent spoken words, which includes phonemic awareness and phonics; (b) fluency, the ability to read with speed, ease, and accuracy and prosody, or rhythm and intonation; (c) vocabulary, understanding the meaning of words in a language; and (d) reading comprehension. Reading comprehension involves all areas of reading in the process of deriving or constructing meaning from text (Kruidenier, 2002). The document produced by the RRGW, Research-Based Principles for Adult Basic Education Reading Instruction (Kruidenier, 2002) identified 18 emerging principles and 32 emerging trends in ABE instruction from the 70 qualifying research studies. Principles were based on findings from at least two experimental studies, including quasi-experimental studies and any number of non-experimental studies. Trends were based on fewer than two experimental and any number of nonexperimental
studies. Principles and trends were designated *emerging* to indicate the relatively small body of research available overall in ABE (Kruidenier, 2002).

A follow-up report was issued in 2010 by the since-renamed Adult Literacy Working Group (ALWG); the report was updated to include several components that had not been specifically examined in the earlier review but that the working group determined were fundamental to reading instruction primarily aimed at adults (Kruidenier, MacArthur, & Wrigley, 2010). Motivation was one such component. The authors assert that motivation promotes learning (Kruidenier et al., 2010). Other topics addressed for the first time by the ALWG included reading assessment, program type (ABE, ASE, ESOL) instructional methods, duration of instruction, and teacher preparation (Kruidenier et al., 2010). For the purposes of the study, the ALWG defined adult reading instruction to include low-literate adults age 16 and over who were being served in community-based literacy programs, family literacy programs, prison literacy programs and two-year colleges. Rather than organizing the conclusions as a series of principles and practices, as it had in 2002, the ALWG expressed its information as *stronger* and *weaker* findings. Like *principles* in the preceding publication, *stronger* findings were based on results from at least two experimental studies from adult education research (including quasi-experimental studies) and a number of nonexperimental studies; findings based on fewer than two experimental studies were labeled *weaker* findings rather than *trends* as they had been designated in the earlier version (Kruidenier et al., 2010). The authors of both reports underscore the importance that instructors address the needs of the learners that populate their classrooms, asserting that classrooms with a preponderance of students at the ABE level, for example,
generally lack skills in all components of reading, while students at higher levels of remediation may benefit from emphasis on vocabulary and strategic comprehension.

While adult education programs often rely on tests published by Comprehensive Adult Student Assessment Systems (CASAS) or the Test of Adult Basic Education (TABE), both to place students and track their progress, most community colleges administer one assessment upon enrollment. The most common placement instruments are ACCUPLACER, published by the College Board, and COMPASS, published by ACT. The results of the placement test determine a student’s starting point in a remedial sequence that encompass up to four levels in reading alone. The placement instruments are not diagnostic. Once students enter the remedial sequence, it is up to the instructor to determine the areas of greatest need and to target those needs with instruction. If students pass the class, their progress in mastering academic vocabulary, making high-level inferences, citing evidence from the text, and monitoring their own comprehension is assumed; no standardized outcome measures are administered. Each instructor develops his or her own criteria to determine whether a student has earned a passing grade. Thus, reading instructors face classrooms filled with students with diverse needs, including those whose native language is not English—which encompasses its own set of unique challenges—as well as students with various learning disabilities, many of which have never been diagnosed or addressed (MacArthur, Konold, Glutting, & Alamprese, 2010). Most community college reading instructors, the majority of whom have been hired on a part-time basis, cope as best they can with the reality of large classes filled with students with widely variant strengths and weaknesses (Grubb & Gabriner, 2013). The only option is one-size-fits-all (or none) generic curricula that generally adhere to course outlines.
with the intent of preparing students for the rigors of the college-level courses they will encounter—if they persist; many, of course, do not (Bailey et al., 2010; Hern, 2010; Rutschow & Schneider, 2012).

With so many daunting challenges, it is imperative that developmental reading instructors are prepared to teach the struggling adult readers who depend on their expertise. They need PCK, which entails a thorough understanding about the challenges faced by students with wide-ranging needs as well as the affective factors that complicate learning (Shulman, 1986). They also need instructors with well-stocked reserves of both broad- and narrow-spectrum tools and the knowledge and experience to select the right ones for the job—curricular content knowledge (Shulman, 1986). The question is, do community college basic skills reading instructors know enough about curriculum and pedagogy to meet the needs of adult developmental reading students?

**Reading Instruction at California Community Colleges**

While the educational background and training of adult basic education instructors varies widely across the country, the background of instructors at California community colleges is more homogeneous. In fact, instructors at any community college in California must meet minimum qualifications, known commonly as “minimum quals,” which include a master’s degree (MA) for most disciplines (Russell, 2012). In order to teach reading, a California community college instructor must earn a MA in education with a specialization in teaching reading or a bachelor’s degree (BA) in any discipline along with 12 units of course work in teaching reading and a MA in English literature, linguistics, applied linguistics, comparative literature, psychology or the equivalent (Russell, 2012, p. 36). None of those requirements include background in adult learning
in general or adult literacy instruction specifically (Russell, 2012). As Kruidenier (2002) pointed out in the early 2000s and confirmed eight years later, research that addresses the level of knowledge or preparation needed by adult basic education teachers to provide optimal instruction is minimal (Kruidenier et al., 2010).

Two issues result from this paucity of research. First, teachers’ knowledge of teaching reading is piecemeal (Moats, 1994), mostly patched together from workshops attended, instructors’ editions of textbooks, experience in the classroom, and casual discussions with colleagues. The absence of a robust body of research in best practices for adult reading instruction creates a situation in which instructors base pedagogical decisions largely on instinct, personal philosophy, and anecdotal information from other teachers (McShane, 2005). Bos, Mather, Dickson, Podjajski, and Chard (2001) note a “continuing mismatch between what teachers know and what research supports as effective reading instruction” (Bos et al., 2001, p. 98). The lack of research also helps explain another mismatch described by Bos and colleagues (2001) between what teachers know and what they think they know, or their perceptions of their own knowledge. They may at the same time lack adequate knowledge about effective reading instruction and be unaware that their knowledge is lacking (Bell et al., 2004).

**Knowledge of Teaching Reading**

Bell et al. (2004) designed the *Knowledge of Teaching Adult Reading Skills (KTARS)* as a step toward understanding the knowledge that adult reading instructors bring to the classroom. The assessment instrument was designed to assess the level of knowledge possessed by adult education teachers in the four areas highlighted by the RRWG reports: alphabetics and fluency, which together comprised basic reading skills;
and vocabulary and comprehension, comprising advanced reading skills. The KTARS consisted of three parts. In the first part, KTARS-Demographic (KTARS-D) respondents supplied demographic information, including job title, primary program area, and area of certification. The second part—KTARS-Direct Assessment (KTARS-DA)—contained 40 multiple-choice questions that assessed knowledge of adult instruction terminology and practices. The third part—KTARS-Self Assessment (KTARS-SA)—contained 40 Likert-like items to assess teachers’ perceptions of their knowledge of adult instruction and terminology. Each question in the KTARS-SA was yoked to an item on the DA scale to determine perceptions of knowledge about the specific practices or terms in the objective test portion (Bell et al., 2004).

The KTARS pilot was administered to 208 participants, most of whom were teachers (77%) attending an adult education conference in a southeastern state. The results were telling. Adult basic educators from the sample tested knew slightly less than half of the content assessed by the KTARS-DA. Likewise, they were generally aware of their level of knowledge (predicted slightly less than 50%) but were less able to pinpoint specific areas in which their knowledge was lacking. Perhaps most significant, the most knowledgeable practitioners underestimated, and the least knowledgeable overestimated the extent of their knowledge (Bell et al., 2004).

**Assessment of Reading Instruction Knowledge-Adults**

The KTARS was developed in 2004 to assess the general population of adult educators. Bell et al. (2013) updated the instrument in 2013 to better facilitate professional development. Now called the Assessment of Reading Instructional Knowledge-Adults (ARIK-A), the instrument comprises two alternative forms intended for
administration pre- and post-delivery of professional development to adult educators (Bell et al., 2013). Like its predecessor, the ARIK-A was developed to determine what adult educators actually know about teaching reading. The ARIK-A is a 58-item, four answer-option multiple-choice assessment of knowledge about research-based practices of reading instruction for adults with low levels of literacy in English (Bell et al., 2013).

Unlike the KTARS, the current iteration does not include a self-assessment. The ARIK-A is currently the only available nationally-normed assessment of adult reading instruction knowledge (Bell et al., 2013). The study that follows is unique in that it employs the ARIK-A to assess the reading instructor knowledge of a delimited population of basic skills reading instructors at public two-year colleges in California. The study will address these research questions:

1. Are there significant differences in performance on the ARIK-A between instructors who meet the minimum qualifications to teach developmental reading with or without specific educational background in reading instruction?

2. Are there significant differences in performance on the ARIK-A between instructors whose primary level of instruction varies between the lowest and highest levels of developmental reading?

3. Are there significant differences in performance on the ARIK-A between instructors who either have or do not have experience in teaching reading or English in the K-12 sector?

4. Are there significant differences in performance on the ARIK-A between full-time and part-time reading instructors?
The study will also explore the following questions related to participation in professional development:

1. Are there significant differences in performance on the ARIK-A between instructors who participate in various numbers of department-sponsored professional development activities?

2. Are there significant differences in performance on the ARIK-A between instructors who consider their professional development participation germane to their teaching of developmental reading?

The final two questions will explore the study’s theoretical framework:

1. Is there a significant difference in sense of collegiality for part-time and full-time instructors?

2. Is there a significant difference in the proportion of full-time and part-time instructors who claim a sense of belonging to a professional learning community within their departments?

**Significance of the Study**

Community college basic skills occupy a netherworld that is not quite high school, not quite adult basic education, and not quite college. Many, but not all, students at a community college are high school graduates. But nontraditional students also occupy the seats in these classrooms: older students who have not occupied a classroom seat of any kind for many years; students who dropped out of high school; students who struggle with learning disabilities that were never diagnosed or well-managed, and students whose native or home language is not English. Research about student characteristics abounds in the literature. In California, the California Community College
Chancellor’s Office issues a yearly scorecard that reports data about student populations at each community college in the state. These data include student age, gender, ethnicity and culture, and report numbers for students tracked over six years who complete 30 units, finish degrees or certificates, or prepare to transfer. The number of students each year who complete certificates in career-technical programs is also reported.

Data on instructors are more difficult to access. The CCCCO issues data only about instructor ethnicity and employment status. Minimum qualifications require that reading instructors have earned a MA in education with a specialization in teaching reading or a MA or higher (EdD or PhD) in a related field along with 12 units of course work in teaching reading. Qualifying disciplines include English, literature, linguistics or applied linguistics, creative writing, and psychology. Theoretically, an elementary school teacher with a MA and background in teaching beginning reading is qualified to teach reading at a community college, as is an individual with a PhD in psychology who completed 12 units of reading instruction through a university extension program. In fact, Smith and Gillespie (2007) claim that many instructors who teach adult literacy are certified at the elementary and secondary levels but have little experience in addressing the needs of adults. Expertise or background in the unique challenges of teaching reading to a diverse population of struggling adult readers is not a condition of hire (Smith & Gillespie, 2007).

This study represents a starting point to determine the knowledge possessed by basic skills reading instructors at California community colleges about assessment and teaching the components of reading to adults. The study seeks to find significant differences in performance on an objective measure of instruction in each of those
components according to instructor educational background, primary level of instruction, experience teaching in the K-12 sector, and participation in professional development. In addition, the study will explore whether sense of collegiality and belonging to a professional learning community within the department can be attributed to employment status. The instrument to be employed is the *Assessment of Reading Instructional Knowledge-Adults (ARIK-A)*, a nationally-normed measure that provides scale scores for each of five components as well as two composite, or global, scores: a basic reading global score (BRGS): alphabetics and fluency; and an advanced reading global score (ARGS): vocabulary and comprehension. Ideally, the study will provide valuable information to inform policy about hiring practice and aid community colleges in the design of practical, well-targeted professional development to stem attrition and promote completion.

**Purpose**

The purpose of this quantitative study was to determine whether significant differences in performance on a measure of knowledge of research-based teaching practices in five areas relevant to community college basic skills instruction could be attributed to educational background, primary level of instruction, experience in teaching reading or English in the K-12 sector, participation in professional development, and employment status. The study further explored whether sense of collegiality and sense of belonging to a professional learning community within the department were based on employment status. Grubb & Gabriner’s (2013) equilibrium model of the Triangle of Instruction served as the central element in the conceptual framework through which the information was analyzed. The three focal points of that triangle—students, instructor,
and content—and the interactions between them were viewed through the dual lenses of Vroom’s (1964) expectancy value theory and Bandura’s (1997) theory of collective efficacy.

The data collection process entailed a demographic survey and online administration of the ARIK-A, a nationally-normed, 58-question multiple-choice assessment of adult reading instructional knowledge. Data were collected from instructors who teach reading in the reading or English departments at the 112 California community colleges.

**Definition of Terms**

*Adult basic education (ABE):* ABE programs are publicly-funded programs offering basic skills instruction to adult learners, age 16 and up, who are no longer being served in secondary education programs. ABE classes typically serve adults with reading, writing, and/or math skills below high-school level. ABE is sometimes distinguished from Adult Secondary Education (ASE) programs, which provide instruction for alternative high school completion or GED (General Education Development) certificates (McShane, 2005).

*Adult reading research:* The reader may assume that research reviewed and discussed in the study included the following attributes:

- employed systematic empirical methods that draw on observation or experiment.
- involved rigorous data analysis that was adequate to test the stated hypotheses and justify the general conclusions.
• relied on measures or observations that provided valid data and was accepted by a peer-reviewed journal or approved by a panel of independent experts through a rigorous, objective review (Kruidenier, 2002).

*Affective domain:* The affective domain encompasses feelings, values, appreciation, enthusiasm, attitude and motivation. Much reading research focuses on the importance of affective factors in engaging students and creating the sense that the classroom is a safe place, which, in turn, promotes learning (Cox, 2009; Kruidenier et al., 2010).

*Close reading:* Close reading is an instructional practice that makes complex texts accessible by providing multiple opportunities to read and reread. Each successive reading is then directed at a different purpose (determining what the text says; how the text is structured; why the author chose certain words or phrases; and what the text means, both to the individual reader and to others). Close reading is an activity that instructors must scaffold carefully to provide support as the reader gains independence. It is often accompanied by collaborative conversations that help deepen understanding of a text (Fisher & Frey, 2014).

*Contextualized instruction:* In general, contextualization focuses on teaching basic skills in reading, writing, and math by embedding instruction in course content. The focus on contextualized instruction is grounded in educational psychology and theories of learning, which submit that students are better able to transfer their learning to new situations, when they understand the underlying principles and when they personally engage with the material. Contextualized learning integrates learning of basic skills with
course content that students perceive as valuable, thus providing an answer to the oft-asked question, “Why do we have to learn this” (Rutschow & Schneider, 2012, p. 35)?

*Developmental, remedial, and basic skills:* terms often used interchangeably to refer to the required courses or sequences of courses intended to prepare students to succeed in credit-bearing, transfer-level English or math. The Center for Student Success (2007) draws a clear distinction between the terms *developmental* and *remedial.* The report explains that the designation *developmental* refers to a natural process of moving from one stage of development to the next and does not imply judgment (in this sense, all learning is developmental) while the term *remedial* connotes inadequacy and need for repair. Likewise, the report describes the term *basic skills* as demeaning and contributing to students’ negative self-concept and suggests *foundational skills* as a less fraught replacement (Center for Student Success, 2007). However for the purposes of this study, as for much of the research, the three terms: *developmental, remedial, and basic skills* are employed interchangeably.

*Disciplinary literacy:* Disciplinary literacy arrived on the reading instruction scene in the late 1990s. It is distinguished from content area reading, which has been part of the conversation for the last 100 years. Whereas content area reading assumes similarity across the disciplines, disciplinary literacy emphasizes the differences (T. Shanahan & Shanahan, 2008).

*ESL/ESOL:* Sometimes used interchangeably, the terms both refer to students whose native language is not English. ESL is an acronym that represents English as a Second Language, while ESOL refers to English for Speakers of Other Languages. Some argue that ESOL is more accurate since it does not presume that English is only the
second language that a learner is acquiring. Much of the literature refers to people who are learning English as English Language Learners (ELLs) (McShane, 2005).

*Functional language analysis:* This is the process of examining the word choices and syntax that are unique to each discipline as to tool toward better understanding both content (math, science, social studies) and language. By helping students see how meaning is presented through language in the various disciplines, teachers empower students to become critical, reflective readers (Fang & Schleppegrell, 2008).

*Nontraditional students:* In this study, the designation nontraditional students is used to refer to students who have not matriculated to community college directly following high school graduation. There is no universally-accepted definition of a nontraditional student; instead, age (especially over age 24) is often used as a defining factor, which encompasses a multitude of features, such as responsibility for dependents, full- or part-time work responsibilities, part-time status, and enrollment in career-technical certificate programs (Grubb & Gabriner, 2013).

*Pedagogical content knowledge (PCK):* PCK was described by Shulman (1986) as the dimension of subject matter knowledge specifically for teaching. PCK includes instructor understanding of what makes learning about certain content easy or complicated for students and familiarity with the conceptions and preconceptions that students of different ages and backgrounds bring to the classroom. PCK includes knowledge of the strategies useful in ameliorating students’ misconceptions (Shulman, 1986).

*Reading:* Reading is “a complex system of deriving meaning from print” that encompasses the following components:
• alphabetics: an understanding of how speech sounds relate to print
• fluency: speed, ease, accuracy and expression; a fluent reader is skilled at
  word identification and reads with appropriate phrasing and intonation
• vocabulary: the store of words we recognize and understand in print
  (www.nifl.gov/partnershipforreading/explore/vocabulary.html)
• comprehension: the goal of reading; comprehension is the outcome of the
  process that results when the reading components act together fluidly. As
  words are decoded, or recognized on sight (alphabetics), associated with their
  meanings (vocabulary) quickly enough that meanings from one phrase can be
  associated with phrases that come before and after (fluency), a reader is able
  to construct meaning from a text (comprehension) (Kruidenier, 2002).

Remedial pedagogy: Grubb & Gabriner (2013) coined this term to describe an
instructional approach that emphasizes drill and practice on small subskills taught in a
decontextualized way that fails to clarify for students the purpose for learning these skills.
Examples might include lessons on punctuation rules, or subject-verb agreement, which
are disconnected from broader objectives, such as clear, effective communication (Grubb
& Gabriner, 2013).

Triangle of Instruction: Developmental education is an instructional enterprise
that involves at the very least, one instructor, one student, and some kind of content. The
learning that takes place is a function of all three, ideally operating in a state of
equilibrium in which interactions between the three elements are balanced. This state of
equilibrium depends upon common conceptions on the part of instructors and student
about the purpose of the course, what learning entails, and the validity of the content (Grubb & Gabriner, 2013).

**Limitations**

The interval between the collection of the names of reading instructors and the dissemination of the survey represents one limitation. The initial roster of potential participants was collected in the spring 2015 semester. The Institutional Review Board approved the study at the end of the same semester (see Appendix A). It was decided to wait until the fall 2015 semester to disseminate the study. Since the vast majority of developmental reading teachers teach part-time, the roster of instructors varies from semester to semester. This resulted in a situation in which some instructors were no longer available. Others who may have become available in the interim were not included as potential participants.

The absence on the ARIK-A of items related to pedagogical content knowledge as described by Shulman (1986) represented another limitation. It is not enough to assess knowledge of vocabulary or comprehension instruction; it is imperative that instructors understand why certain concepts and strategies are complicated for students and what tools might be employed to repair misunderstandings—essentially the effective instructor’s metacognitive toolkit.

**Delimitations**

As explained in the significance section, this study was intended to serve as a starting point to inform hiring practices and help community colleges develop effective professional development that targets the instructional needs of struggling adult readers. However, in the same way that Grubb and Gabriner (2013) maintain that a classroom
focus on discrete skills does not best serve students, an objective measure of teacher
knowledge of discrete components of reading does not come close to encompassing the
wide range of experience, knowledge, and affective variables that contribute to effective
teaching. Ideally, this study would be followed by a qualitative investigation to deepen
understanding about how knowledge of teaching the components of reading contributes
to effective teaching and why that foundation of knowledge is important. Unfortunately,
time constraints made a follow-up qualitative investigation impractical.

It was decided to delimit the sample to developmental reading instructors in
California. This decision was based on the knowledge that hiring practices at California
community colleges fall under the auspices of one governing group, the CCCCO. This
provides some consistency to the educational backgrounds of instructors, one factor that
was important in several of the research questions. California community colleges
encompass a wide and diverse range of geography, population, and languages as well as
rural, metropolitan, and suburban areas. The combination of consistency in policy and
diversity in program and student population provided an ideal foundation for
generalizability.

Assumptions

The underlying premise of a study about what developmental instructors know
about research-based best teaching practices is that this knowledge bears a significant
relationship to student success—or lack of success—at preparing students to deal with
college-level text and ultimately reach their goals. While a plethora of research is devoted
to student characteristics, research that examines instructor characteristics is hard to
access, mainly because there is not much of it. This study only begins to address that gap.
The assumption about the importance of pedagogical knowledge includes another assumption that is equally compelling: developmental students are a particularly vulnerable subset of college students. They need instructors who are attuned to their affective needs as well as their need for content knowledge. Both are often lacking compared to that of their better-prepared peers.

As this study is underway, California Assembly Bill 86 (AB 86) and the follow-up bill AB 104 have resulted in the formation of 70 consortia comprised of community colleges, K-12 adult schools and partners charged with taking a close look at programs in place, expanding, and improving the delivery of adult education statewide. The state of California has operated under the assumption that the basic skill levels of adults enrolled in GED and high school completion programs at K-12 adult schools or continuing education programs differ substantially from those of community college developmental students. However, the AB 86 process has illuminated the overlaps. Because adult school and continuing education (CE) programs generally administer the TABE or CASAS assessments, and community colleges administer COMPASS or ACCUPLACER, the similarities in the actual strengths and weaknesses in math, reading, and writing have not been clearly evident. However, both the research and personal experience attest to the fact that the basic skills needs of these student populations are essentially identical (Kruidenier et al., 2010; McShane, 2005). The research about ABE/ASE is relevant to developmental education. The research about developmental education is relevant to ABE/ASE. There are differences, too, of course, mostly related to goals. A greater proportion of students in developmental classes at the community college express interest in earning associate’s degrees or transferring to four-year institutions. However, the
dismal completion rates at community colleges attest to the ultimate frustration of those goals. In the case of basic skills education, the assumption that lack of student preparation in reading, writing, or math skills is the primary obstacle in the way of success may be the most intractable obstacle of all. Lack of preparation is as salient an issue for the institutions as it is for the students who attend them. Colleges need preparation for the students they have. Real progress requires radical change—to instruction, to organization of programs, and to policy. That must begin with the acknowledgment that basic skills students need motivated, knowledgeable instructors who keep abreast of the research, recognize and address their unique affective needs, and are invested fully in their institutions, just as the institutions are invested fully in them.
CHAPTER 2—LITERATURE REVIEW

The majority of students who launch their college careers bearing the label “underprepared” in reading, writing, and/or math will never complete college (Bailey et al., 2010; Brown & Niemi, 2007; Grubb & Gabriner, 2013; Hern, 2010; Rutschow & Schneider, 2012). The reasons for this lack of persistence are legion: lack of alignment between high school preparation and the demands of college coursework, (Venezia & Jaeger, 2013; Venezia et al., 2003), placement tests that are weak predictors of subsequent performance (Scott-Clayton, 2012), an inverse relationship between the duration of remediation and college completion (Bailey et al., 2010), and a mismatch between the instructional practices in remedial classrooms and the demands of credit-bearing college coursework (Grubb & Gabriner, 2013; Jenkins & Cho, 2012). The open-access policy unique to community colleges is credited with providing educational opportunities to all students. However, it will entail transformative changes that seep into the core of these institutions to ensure that college is not only accessible to students but also instrumental to their success. Tom Bailey, co-director of the recently-launched Center for the Analysis of Postsecondary Readiness (CAPR) told the White House Summit on best practices in remedial education that effective remedial reforms must be pursued in the context of broader institutional reforms that attend to the entire student experience (Center for the Analysis of Postsecondary Readiness, 2014).

The literature review that follows will examine several underlying issues that inform the discussion about improving the system of remedial education, which serves as both the gateway and the gatekeeper to a college education. The issues might broadly be conceptualized as those that apply to policy and those that pertain to pedagogy. First, the
A literature review will examine how differing interpretations of “college readiness” impede student progress. Next, the discussion will focus on the overarching theme of alignment. This will include an examination of the match between high school graduation requirements and college expectations; alignment between the assessments and assumption of college readiness, and alignment between the requirements in developmental education classes and the expectations of the content-area instruction that ensues.

An examination of the role of the recently launched Common Core State Standards in correcting some alignment issues will follow. Special attention is paid in this literature review to reforms in California, especially the potential of the California Acceleration Project (CAP) and the Early Assessment Program (EAP) to improve persistence and raise graduation rates (Hern, 2012; Hern & Snell, 2013; Hodara & Jaggars, 2014). These reforms are examined in the context of four interventions that seem to hold promise for improving outcomes for underprepared students: avoidance, acceleration, contextualization, and enhanced support (Rutschow & Schneider, 2012).

The literature review will then focus on specific classroom practice that applies to reading instruction. Recent research has focused on the necessity to engage students in strategic reading of extensive academic text (Caverly, Nicholson, & Radcliffe, 2004), to guide students in making connections between texts (Armstrong & Newman, 2011), to read closely for both explicit meaning and to discern a text’s craft and structure (Fisher & Frey, 2013), and to gain facility with text that is specific to the various disciplines (C. Shanahan, Shanahan, & Misischia, 2011).
Finally, the literature review will examine the intersection of policy and practice by investigating the literature on professional development and the institutional practices that either encourage or impede professional growth. Robust professional development promotes collaboration among stakeholders and builds collective efficacy (Bickerstaff & Edgecombe, 2012). The literature review will conclude with an explanation of the conceptual framework that structures this study.

**Institutional Issues**

It would be illuminating to begin the examination of the challenges that face community college developmental education and educators at the broadest societal levels. Such an approach would entail an in-depth examination of the fundamental inequalities in the American education system that result in the students from the lowest socioeconomic groups receiving the poorest academic preparation. Developmental education was intended originally as means to equalize the opportunities for students despite poor preparation (Cohen & Brawer, 2008). Such a broad examination of social issues, however, is beyond the scope of this paper. Instead, the literature review begins by exploring the policies in place at the institutional level that result in the rising tide of students guided into developmental sequences.

**College Readiness: Academic**

College readiness is generally understood as the level of preparation required to enroll and succeed in a college program without the need for remediation (Venezia & Jaeger, 2013). That preparation encompasses elements that are both academic and nonacademic (Cox, 2009; Karp & Bork, 2012; Venezia & Jaeger, 2013). Conley (2010) distinguishes between *college-eligible* and *college-ready*. He outlines four major
components of college readiness: development of key cognitive strategies, mastery of key content knowledge, proficiency with a set of academic behaviors, and sufficient “college knowledge” about the requirements of postsecondary education (p. 18). Academic behaviors include a range of self-management skills, persistence with challenging tasks, and study skills; college knowledge entails the ability to navigate the many details involved in applying to college and managing decisions about applying for and managing financial aid. Conley (2010) claims that much of this information is privileged, clear to those with easy access to college but hidden from those who are first in the family to attend college, which describes precisely the majority of low-income students who populate community college classrooms.

**College Readiness: Nonacademic**

Nonacademic factors may play the central role in college readiness. Grubb and Gabriner (2013) describe behaviors that lead many community college instructors to conclude that students “are not ready to be college students” (p. 24). They arrive late to class, spend time on cell phones, and fail to complete homework, behaviors unacceptable to most instructors (Grubb & Gabriner, 2013). Costa and Kallick (2000) coined the term “habits of mind” (p. 26) to describe behaviors that contribute to success; these include critical thinking, interpretation, accuracy, engagement in ideas, openness to feedback, and the ability to persist through frustration (Conley, 2007; Costa & Kallick, 2000). Karp and Bork (2012) contend that the behavioral standards and attitudes critical to success are often incomprehensible to students from families without college backgrounds and not articulated clearly by professors. Cox (2009) concurs, describing the alienation experienced by students who lack peer support and community resources and do not
receive effective counseling or opportunities to network with people who have succeeded in college (Conley, 2010; Costa & Kallick, 2000; Cox, 2009; Goyette, 2008; Venezia & Jaeger, 2013). Long-ingrained habits of mind that sustained them well enough to graduate from high school do not prevent the label *unprepared* once they reach college (Cox, 2009).

Cox (2009) and Cohen and Brawer (2008) outline the vast changes in college-going habits since the start of the 20th century when only about 6% of the U.S. population graduated from high school and 4% attended college. Today the high school graduation rate is close to 90%; 45% of 18-21 year olds attend college. Community colleges enroll over half of all Black college students and two-thirds of all Latino college students. Most of that expansion has taken place since the early 1970s when new policies increased access (Cohen & Brawer, 2008; Cox, 2009). The demographic diversity poses a challenge. The stereotypical traditional college student—one who attends college for the sake of learning, is highly motivated, and takes responsibility for his or her own learning—is no longer the typical college student (Cox, 2009). A report from the National Center for Educational Statistics (NCES) (2003) estimated that nearly 75% of all undergraduates possessed nontraditional characteristics, which include financial independence (full-time jobs), part-time student status, delayed enrollment after high school, and responsibility for dependents. Given this transformation in the college-going population, Cox (2009) poses a question that informs this dissertation: “Are colleges prepared to educate today’s students” (Cox, 2009, “Today’s College Students,” para. 13)? She suggests that the gap between those who aspire to earn college degrees and those who succeed indicate that they are not.
While perceptions of college readiness vary between institutions and even between instructors, millions of students, some recent high school graduates and others nontraditional by virtue of age or veteran status, enter community colleges each year with intentions to complete certificate and degree programs or transfer to four-year baccalaureate-granting institutions (Venezia, Bracco, & Nodine, 2010; Zachry & Schneider, 2012). Others plan to qualify for nursing or short-term technical career programs. They take the requisite placement tests, believing the tests are a bureaucratic formality, only to discover that they are one, two, or even three levels below “college ready,” in one or more subjects. This relegates them to several semesters playing catch up before they can enroll in a class that counts toward completion (Chaplot, Rassen, Jenkins, & Johnstone, 2013; Kurlaender & Larsen, 2013). This is not a minor issue, nor is it limited to some regions of the United States. In fact, a report from the The Research and Planning Group for California Community Colleges (2009) indicates that it is “reasonable to conclude that two-thirds or more of community college students enter college with academic skills weak enough in at least one major subject area to threaten their ability to succeed in college level courses” (Bailey, Jeong, & Cho, 2010, p.13). That number translates to 1.7 million American students each year who launch their college careers by enrolling in developmental reading, writing, and math classes before taking an English (reading and/or writing) or math class for credit (Complete College America, 2012). More than four-fifths of campuses in the country restrict enrollment in some college-level courses until remediation is complete. Students in need of more than one remedial course in the same subject could theoretically take courses for more than a year before enrolling in a credit-bearing course (Bettinger, Boatman, & Long, 2013). This
detour drains both student morale and resources. Federal student aid is limited to 30 credits of remedial course work, the equivalent of one full year. Remedial credits cost the same as transfer credits but do not count toward graduation (Bailey & Cho, 2010; Grubb & Gabriner, 2013).

The next section will describe placement into developmental classes and the effect of that placement on persistence. Subtopics, such as alignment between the expectations of high school and college, alignment between high school assessments and college placement instruments, and alignment between basic skills instruction and skills needed in transfer-level courses will be explored.

**Placement**

Given the multiple factors that contribute to college readiness and the disagreement about what constitutes college readiness, the decision about an individual student’s level of preparation is problematic, if not arbitrary (Levin & Calgano, 2007). Since community colleges must evaluate the college readiness of thousands of incoming students each year, most use standardized, computer-adapted placement tests. The most common assessment instruments are the Computerized Adaptive Placement Assessment and Support Systems (COMPASS) published by ACT used at 46% of community colleges and the ACCUPLACER published by the College Board, used at 62% of community colleges (Bettinger et al., 2013; Scott-Clayton, 2012). Most California community colleges also administer these same placement instruments (Grubb & Gabriner, 2013). Some schools “mix and match” depending on the subject. Both COMPASS and ACCUPLACER include a written essay exam, an ESL exam and computer-adaptive tests in reading comprehension, writing/sentence skills and several
modules of math (Scott-Clayton, 2012). A computer-adaptive test adjusts the level of question difficulty based on responses to previous questions.

Assessment practices also vary widely from state to state, system to system and school to school. Tests may be mandatory, or students might defer them and enroll directly in some introductory courses. ACT/SAT scores or high school test scores and grades might exempt some students from the placement tests. Some fields of study (e.g., some career-technical programs) do not require testing or may use an entirely different test. Placement decisions may be based solely on test scores, may incorporate multiple measures, or may be left to the discretion of the student (self-directed placement). Cutoff scores that determine placement often vary from school to school and from year to year, even within systems (Scott-Clayton, 2012).

The lack of standardized assessment practices may be partially implicated in a high incidence of student misplacement. Hodara and Jaggars (2014) report that unnecessary assignment to remedial courses has serious consequences that overshadow possible advantages. In a nationwide study of 57 colleges participating in the Achieving the Dream project, Bailey et al. (2010) reported that student completion rates drop with each additional required level of remediation. In fact, only 28% of community college students who take a developmental course go on to earn a degree within eight years (Jaggars, Edgecombe, & Stacey, 2014). Two Community College Research Center (CCRC) studies—one of a large urban community college system and the other of a statewide community college system—reported high numbers of severe placement errors. Using a regression discontinuity (RD) approach, the CCRC study randomly assigned students whose assessment test scores were either just above or just below the cutoff
score to college level or remedial classes and compared their performance. The report concludes that if cutoff scores were effective predictors of success in college-level courses, then students assigned to remediation who just missed the cutoff scores would have better outcomes than those assigned to enroll directly in college-level courses. However, this was not the case. Instead, the findings indicated that the assignment to developmental courses had a mostly null and sometimes negative effect on outcomes for students near the cutoff, suggesting that “students spent time and tuition on courses that may have made no discernible differences in their ability to succeed in college” (Jaggars et al., 2014, p. 4).

Hern and Snell (2013) in California concur. They characterize the leakage of students from developmental sequences as “the pipeline effect”—students leak away by not enrolling, not passing, and/or not persisting to a subsequent level (p.1). They underscore the direct connection between placement into basic skills and lack of persistence.

In California, the issue is especially problematic. Grubb and Gabriner (2013) describe the lack of a systematic approach to assessment in California. The 112 California community colleges use different placement tests and cutoff scores for determining developmental course placement (Brown & Niemi, 2007; Grubb & Gabriner, 2013; Kurlaender & Larsen, 2013; Venezia et al., 2010). Many colleges create their own assessments, making it nearly impossible for high schools to prepare students for these high stakes assessments. The inconsistency in assessments reflects inconsistency in what is considered subject area proficiency (Brown & Niemi, 2007). High school instructors
commonly note that college assessments such as COMPASS and ACCUPLACER do not provide useful information to guide instruction (Grubb & Gabriner, 2013).

Grubb and Gabriner (2013) also note a general lack of awareness on the part of students that placement tests have high stakes with long-term consequences. Results of focus groups conducted at five California community colleges revealed that students generally experience assessment and placement as a single event—a “one shot deal”—rather than a process for which they could begin preparing in high school, or even earlier (Venezia et al., 2010, p. 18). Consequently, students typically fail to prepare or even review before walking in the door to take the tests. Grubb and Gabriner (2013) also note the tendency of the lucrative test preparation business to ignore students headed for community college; the focus and the money in the testing business are directed at high stakes assessments, such as the SAT and ACT, administered to students who can afford to pay for higher-priced educations—and test preparation services.

**Persistence**

Students are typically surprised to learn that their college trajectory will begin in remediation. High school graduation rates are at a 40-year high. Yet more than half of all community college students enroll in at least one developmental, or remedial, course during their college tenure (Bailey et al., 2010; Rutschow & Schneider, 2012). Community colleges struggle to graduate their students, with only one-third completing a certificate or degree within six years. Over half of these students begin academically underprepared, and very few of these students complete the remedial sequences, much less graduate or transfer (Rutschow & Schneider, 2012). In fact, a study of 250,000 community college students noted that 30% of students advised to enroll in a
developmental course never show up for class at all, and 30% of the students who complete a remedial sequence do not attempt a gateway, or initial credit-bearing course, within two years (Complete College America, 2012). Bailey et al. (2010) note that students who skip recommended developmental sequences and instead enroll directly in gateway courses—permitted by some community colleges—are statistically more likely to pass those courses than those who comply with the developmental placement before enrollment. The authors explain that the advice to take remedial course work dissuades many from persisting, or indeed from enrolling at all. Bailey et al. (2010) assert that statistically, students who “ignored the advice of counselors and proceeded directly to college-level courses, made wise decisions” (p. 261). They concede, however, that individual students are slightly more likely to pass a gatekeeper, or initial credit-bearing class, after completing a developmental class in that subject.

The next section of this review will address issues that relate to alignment between high school and college. That alignment—or misalignment—relates to both classroom content and assessment. The section will include a discussion of the newly launched Common Core State Standards for K-12 and their implications for community colleges. The review will highlight efforts in California to strengthen alignment between high school and college.

**The Transition From High School to College**

The disjunction between high school achievement tests and community college readiness is well-documented (Brown & Niemi, 2007; Conley, 2007; Kurlaender & Larsen, 2013; Venezia & Jaeger, 2013; Venezia & Voloch, 2012). However, the issue is greater than misaligned assessments. The overriding issue is a fundamental mismatch
between the knowledge and skills needed to graduate from high school and the knowledge and skills needed to succeed in college (Venezia et al., 2003). Many factors perpetuate the mismatch. Venezia et al. (2003) outline state policy issues that have sustained and promoted it. Postsecondary respondents to a qualitative study of five regions of the United States revealed lack of awareness about K-12 standards and assessments. Likewise, K-12 educators lack information about specific postsecondary admission and placement policies. Both sets of respondents acknowledged lack of voice in devising the standards or assessment for the other (Venezia et al., 2003).

Since high schools receive funding based on average daily attendance, retaining students in high school until they graduate assumes priority over ensuring that students have mastered the knowledge and skills needed to succeed in college. Community colleges receive funding based on full-time enrollments (FTEs). Steady streams of high school graduates replenish the steady streams of attrition from community colleges, resulting in little incentive for collaboration between the two systems (Venezia et al., 2003). This creates the revolving door described by Grubb and Gabriner (2013) and Hern (2010) in which a large number of students begin their college careers in remedial classes, drop out after the first year, and are replaced by a fresh infusion of recent high school graduates each fall.

The mismatch between the academic expectations of high school and college affects students from low socioeconomic backgrounds most acutely. Venezia and Jaeger (2013) describe the disparities between the quality of instruction available at high schools with high concentrations of students in poverty with that available to students who attend high schools predominated by students from more advantaged backgrounds. In the 2010-
2011 academic year, more than 49 million students were enrolled in public K-12 schools. The racial and ethnic disparity is illustrated by some key characteristics. Sixty percent of Asian/Pacific Islander and just over half of White high school freshmen attended schools in which the counselors reported that the primary goal of the school guidance program was college preparation. In contrast, 44% of Black freshmen, 41% of Hispanic freshmen, and 29% of American Indian/Alaskan Native freshmen attended such schools (Venezia & Jaeger, 2013). Kurlaender and Larsen (2013) attribute fundamental differences in outcomes between students from different racial and ethnic groups to quality of K-12 schooling experiences and disparities in expectations on the part of counselors and faculty. Conley (2007) emphasizes the gravity of the issue. As the proportion of students going directly from secondary to postsecondary education continues to grow, and more students see a college education as a key to success in the new economy “the evolving needs of students compel us to make changes in the relationship between high schools and colleges” (p. 26).

Conley (2007) suggests practical steps to improve alignment, such as forums in which high school leaders and local colleges compare high school course content to college readiness and state standards to analyze the progression of content through high school and into college. Moreover, Conley (2007) promotes a school-wide syllabus and development process at the high school level to further ensure quality instruction and promote faculty collaboration. This suggestion hearkens back to the early 1900s when the College Entrance Examination Board attempted to define uniform standards and distributed course syllabi to high schools throughout the country (Cohen & Brawer, 2008;
Venezia et al., 2003). However, a recent development might change the outcome this time around, more than a century later.

**The Common Core State Standards**

The Council of Chief State School Officers (CCSSO) and the National Governors Association (NGA) led an initiative beginning in 2009 to create a set of standards in math and English to determine what students across the United States should know by the time they graduate from high school. The Common Core State Standards (CCSS) provide a framework to ensure that all students who graduate from high school have the skills and competencies needed to succeed in college or career (Barnett, Fay, Trimble, & Pheatt, 2013). Though colleges have long criticized high schools for handing out diplomas to unprepared students, there has been little effort thus far to define in a concrete, useable way, what “college-ready” actually means (Barnett et al., 2013). Barnett and Fay (2013) assert that the CCSS initiative represents the first solid attempt to outline what students should know by the time they graduate from high school.

The CCSS were designed to close gaps that exist between high school graduation requirements and college entry requirements in English and math (Barnett & Fay, 2013). The gaps are extensive, as discussed earlier. An analysis of ACT testing in 2010 found that only 31% of 11th grade students could be considered college and career-ready under the CCSS when evaluated on reading a complex text.

One of the first challenges facing developers of the CCSS was reaching consensus about the definition of college readiness. The development of the standards was underpinned by agreement from all stakeholders that college readiness and career readiness were essentially the same (Nelson, 2013). Nelson (2013) underscores the
Two consortia, each comprised of multiple states were charged with developing assessments aligned with the CCSS in time for the 2014-2015 academic year: Partnership for Assessment of Readiness for College and Careers (PARCC) and Smarter Balanced Assessment Consortium (Smarter Balanced) (Barnett & Fay, 2013). Both consortia have agreed that the 11th grade assessments will have designated cutoff scores that indicate college and career readiness in math and English. These summative assessments will presumably align with the CCSS college and career readiness standards. They will also serve as the official state standardized tests that meet accountability requirements for No Child Left Behind, the Elementary and Secondary Education Act (Barnett & Fay, 2013). Higher education officials in large numbers have agreed to use these test scores for placement purposes as part of a system of multiple measures that includes courses completed in high school, grades, and other test scores to support placement decisions. This could have far-reaching implications for community colleges, as the tests that are primarily used now to place students—ACCUPLACER and COMPASS—frequently and even severely misplace students, relegating students to burdensome and unnecessary detours through basic skills courses and frequently derailing their plans to finish college (Bailey et al., 2010; Nelson, 2013).

Basing college placement decisions on assessments administered to 11th graders will have several implications for community colleges. Demand for dual enrollment may increase as considerable numbers of high school students discover that they have already satisfied high school requirements in English and math (Barnett & Fay, 2013; Nelson,
This will also allow students who perform poorly on the assessments to use their final year of high school to catch up, saving them from beginning college in remediation.

While the CCSS represent a coordinated national effort, community colleges have contributed little to that effort thus far, which researchers contend is surprising given the overriding emphasis of the CCSS on college readiness (Barnett & Fay, 2013). However, the ball is now rolling, and as it gains momentum, the implications for community colleges, particularly developmental-level offerings, promise to be far-reaching in terms of improved pedagogy, alignment of developmental and 12th grade curricula, better textbooks, and strengthened partnerships between high schools and local community colleges (Barnett & Fay, 2013).

**Alignment in California**

In California, the Policy Analysis for California Education (PACE), a coalition of policy, education, and business leaders, focuses on improving the preparation of students for college and careers. Its mission includes the objective to expand the understanding of the importance of aligned standards and assessments. PACE recognized that the majority of incoming freshmen to the California state university system graduate from high school with grade point averages greater than 3.0 yet still require remedial course work upon college entry (PACE, 2012). PACE helped to initiate California’s Early Assessment Program (EAP) in 2008 to address this inconsistency. The EAP combines 11th grade testing for college readiness with 12th grade opportunities to fill in gaps (Venezia et al., 2010). In effect, the EAP functions as an early warning system to alert parents, teachers and students that the latter are not adequately prepared for the academic rigor of college. EAP also serves as a common indicator of readiness for nonremedial credit-bearing work
in all the colleges and universities in California, including University of California (UC), California State University (CSU) and the community colleges (PACE, 2012). Although rates of voluntary participation in EAP have increased, remediation rates decreased only slightly, so far. Criticism of the EAP is aimed at its timing. Since community-college-bound students are often more than one year behind, they frequently need more than one year to catch up before they go to college (Venezia & Voloch, 2012). A study by researchers at four CSU campuses examined the effectiveness of the Expository Reading And Writing Course curriculum (ERWC), a 12th grade curriculum offered to students whose EAP scores indicated need for further instruction (Venezia & Voloch, 2012). The ERWC was developed by the CSU system. It is based primarily on nonfiction texts and emphasizes the study of analytical, expository, and argumentative reading and writing. A study of its early implementation found that students who were exposed to the ERWC curriculum improved their English proficiency more than students who were not exposed to the curriculum. There was also an unintended consequence. A PACE study (2012) noted that teaching the ERWC had a positive impact on high school teachers, who gained understanding about the skills students need for academic success in college.

Passage of California Senate Bill 946 in 2011 initiated community college acceptance of EAP test results in lieu of college placement tests. As of 2012, more than half of California community colleges accept at least one component of the EAP assessment to waive placement tests (e.g., English, Math, or Math Conditional) (PACE, 2012). There are many challenges to widespread replacement of current placement processes by EAP since the system in place is firmly entrenched. The EAP is still voluntary, requiring students to opt in to additional test questions when they take the
annual California Standards Tests, which will soon be replaced by the Smarter Balanced assessments. Major challenges involve communication within and between the various sectors involved: high school and college faculty, counselors, parents, and students. However, the benefits to using EAP results to place students in college are multiple. In addition to the “early-warning” function, which provides the opportunity for students to enhance reading, writing, or math skills during their senior year, the EAP is also more nuanced. It provides diagnostic information as well as levels of proficiency. Once the Common Core State Standard initiative and its associated assessment arm Smarter Balanced Assessment Consortium (SBAC) become firmly established in the state, the EAP might evolve to include competencies that reflect the deeper knowledge and learning skills needed for success in college and career (Kurlaender & Larsen, 2013; PACE, 2012). This could mitigate the common complaint that current assessments such as COMPASS and ACCUPLACER do not provide useful information to direct instruction (Grubb & Gabriner, 2013).

California has taken other steps to improve the transition from high school to college. Two such efforts will be described in the following section: The Long Beach College Promise and the Federation for a Competitive Economy (FACE), a joint project of K-12 and stakeholders in higher education from Riverside and San Bernardino counties.

In 2008, Long Beach Unified School District, Long Beach Community College (LBCC), and CSU Long Beach (CSULB) joined forces to improve college preparation, access, and completion for members of the greater Long Beach Community. The program, dubbed “Long Beach Promise” allows students who use their senior year to
reach proficiency in math and English to enroll directly in credit-bearing courses at LBCC and offers them a tuition-free semester if they enroll in college directly following high school graduation. Admission to CSULB is guaranteed if a student has completed all college preparatory courses with satisfactory grades and meets other requirements of admission. This arrangement is significant since the Long Beach colleges are trusting LBUSD to effectively prepare students for college-level work (PACE, 2012).

Based on the Long Beach Promise model, business and educational leaders from the Inland Empire’s (Riverside and San Bernardino Counties) K-12 community and higher education segments joined forces in 2009 to establish the Federation for a Competitive Economy (FACE). The focus of FACE is to improve education in the Inland Empire to help the region reboot its economy, both of which lag behind much of California. Both counties have low levels of education among their workforce, with 20% of Riverside County adults and 18% of San Bernardino County adults possessing a college degree, lower than the statewide average of 30% (FACE, 2014). FACE is working to expand EAP in the Inland Empire in order to improve alignment and provide clearer messages to students, parents, and educators. FACE has also identified reading comprehension, mathematics and algebraic thinking, and basic writing skills - the skills assessed by EAP- as skills necessary for entry-level jobs (PACE, 2012).

Improved alignment between high school and college is one goal. Another is improved efficiency as students navigate developmental course sequences in English, reading, and/or math. The next section will review some promising reforms in course and sequence delivery, again with particular emphasis on California.
Reforms in Developmental Course Delivery

Since a growing body of research suggests that the effects of remedial courses vary considerably by state, institution, and background, administrators and policy makers have responded by redesigning developmental course offerings and searching for ways to deliver remediation more efficiently (Bettinger et al., 2013). To complement a national conference hosted in 2010 by the National Center of Postsecondary Research at Teachers College, Columbia University, researchers conducted a literature review to highlight the most promising reforms in developmental education of the past 40 years and suggest future areas for research and practice (Rutschow & Schneider, 2012). Rutschow and Schneider (2012) identified four broad intervention strategies: avoidance of developmental courses, acceleration, contextualization, and enhanced support. Among the four, acceleration and contextualization seemed to hold the most promise for improving outcomes. The researchers included studies with large student samples that employed some type of comparison group research design. The most rigorous studies employed an experimental design, in which students were randomly assigned to a program group that received intervention or a control group (Rutschow & Schneider, 2012). Although it is beyond the scope of this literature review to examine the wide array of alternatives for delivering developmental education, this review will describe some exemplars in detail.

Avoidance

Developmental sequences were conceived as a way to level the playing field for students from every background and open access to a postsecondary education to underrepresented groups of students. Yet, they are also criticized for creating
insurmountable barriers to student progress (Bailey et al., 2010; NCES, 2003; Rutschow & Schneider, 2012). In response, several colleges have begun to focus on ways to help students avoid developmental sequences altogether. One strategy is early alert. This allows students to spend their senior year catching up to their better-prepared peers. The EAP, in California, discussed earlier, is one example. Another strategy, common across the U.S., is dual enrollment (Rutschow & Schneider, 2012). One such program includes At Home in College (AHC) at City University of New York (CUNY), a college transition program designed to support students from New York City public high schools who have not met traditional benchmarks for college-readiness. The program developed from CUNY’s system-wide dual enrollment program, College Now, comprises a two-semester sequence of English courses taught by specially-trained high school teachers during the school day; it employs nonfiction texts to help students develop academic literacy skills through course assignments that mirror the CUNY Assessment Test in Writing (Venezia & Voloch, 2012; Rutschow & Schneider, 2012).

At the end of the first semester in January, students may take the CUNY placement exam, which signals their level of preparedness for college-level courses. The delay in test administration until the end of the fall semester affords students a better idea of what to expect and why the exams are important (Karp & Bork, 2012; Venezia & Voloch, 2012; Rutschow & Schneider, 2012). Research on dual enrollment programs for academically needy students is promising but relatively limited. Although some studies use comparison groups, most make simple comparisons that do not account for factors such as preexisting differences in students’ prior achievement (Rutschow & Schneider, 2012).
Avoidance With Mainstreaming

While remediating gaps in students’ skills and knowledge before they enroll is ideal, students’ paths to postsecondary education are often circuitous. Many years may elapse between high school and college (Grubb & Gabriner, 2013; Karp & Bork, 2012; Levin & Calgano, 2007; Rose, 1989; Rutschow & Schneider, 2012). Students who need only to refresh their math or English skills or whose assessment scores fall just below the cutoff may benefit from mainstreaming, one model that has gained attention recently. Mainstreaming is based on the premise that a student is capable of college-level work if he/she receives supplemental supports, such as study skills courses or tutoring (Venezia & Hughes, 2014; Rutschow & Schneider, 2012). This model is exemplified by the Accelerated Learning Program (ALP) at the Community College of Baltimore County (CCBC), initiated in 2007 (Hodara & Jaggars, 2014; Jaggars et al., 2014). Students who place into upper-level developmental writing enroll in college-level English (English 101) while concurrently enrolled in an academic support course taught by the same instructor, which meets in the period immediately following. Early results were promising, though their small sample size limited generalizability. A 2010 study by the Community College Research Center found that students who participated in ALP were more likely to pass English 101 than were those students who began in the highest-level developmental writing course (Cho, Kopko, Jenkins, & Jaggars, 2012; Jenkins, Speroni, Belfield, Jaggars, & Edgecombe, 2010; Rutschow & Schneider, 2012). The program also proved cost effective. By eliminating sections of developmental writing and integrating additional support for underprepared students, the cost of educating a student through English 101 and 102 fell from $3,122 to $2,680 (Cho et al., 2012).
The results of the mainstreaming effort at CCBC are promising, but Edgecombe, Cormier, Bickerstaff and Barragan (2013) underscore the challenges of implementing programs such as this one on a large scale. Drawing from Scaling Innovation, a research and implementation project at CCRC, Edgecombe et al. (2013) outline the obstacles to widespread developmental education reform, including the tendency to adopt “minimally disruptive, small-scale approaches” that limit their impact (p. 1). The experiment at CCBC, for example, entails scheduling challenges for both faculty and students that present obstacles to full-scale implementation. The obstacles are not insurmountable; however, sustainable innovations require a functional infrastructure that is both flexible and durable and that entails cooperation among policymakers, administrators, faculty, and students (Edgecombe et al., 2013).

**Acceleration**

Many community colleges in the United States currently seek to reduce the time students spend in remediation by accelerating their progress through developmental courses, drawing from a number of acceleration models based on local context, student need, and subject matter (Venezia & Hughes, 2014). Fast-track models that offer classes in a compressed time frame or that combine two levels of a developmental subject back-to-back in the same semester is a model currently on trial at Southwestern College near San Diego (S. G. Navarette, personal communication, September 16, 2014). Although there is little rigorous research documenting success of Fast Track models, simple comparisons indicate promising trends (Rutschow & Schneider, 2012). Whatever model of acceleration is implemented—mainstreaming, compression, or the division of a semester-long course into short modules designed to improve a specific skill—the college
and students benefit from the opportunity to rethink the curricula (Venezia & Hughes, 2014). Studies note the reduction in the number of exit points, and the increase in likelihood of transfer or degree and certificate completion (Bettinger et al., 2013; Burdman, 2012; Hern, 2010; Hodara & Jaggars, 2014; Venezia & Hughes, 2014).

**Acceleration in California**

Although California has one of the most well-funded and respected public research university systems in the country, its community college system is chronically underfunded (Burdman, 2012). Grubb and Gabriner (2013) describe the parallels between the hierarchy of postsecondary opportunities delineated by the California Master Plan in 1960 and levels of spending. While the University of California spends about $21,000 per student on instruction, and state universities spend about $13,500 per student, community colleges spend only $5,450, less than the per-student funding in the K-12 system. Lack of sufficient funding underscores the frustration of many in the postsecondary community college world who are faced with the most difficult educational challenges of the system—helping low-skilled students obtain needed skills in a short period of time. Grubb and Gabriner (2013) highlight the widespread perception that basic skills instruction, one of the lowest-status roles of the community college gets “short shrift” in internal funding decisions, suggesting that basic skills represents “a low-status mission in a low-spending state in the institution with the lowest levels of spending per student in all of higher education” (p. 170). Shortening developmental sequences to propel students along the paths they first envisioned makes sense from many angles.

Chabot College in California, founding site of CAP, a state-funded initiative of the California Community Colleges’ Success Network (3CSN), began in 2000 to offer
two options to students whose ACCUPLACER scores indicated a need for developmental English. Students could self-place into either a two-semester sequence of integrated reading and writing instruction (8 units) or an accelerated one-semester reading and writing course (4 units). Both options were open to students regardless of ACCUPLACER score, and both lead to college English (Hern, 2010). The results surprised even Hern, co-founder of CAP. Students who self-placed into the one-semester accelerated course passed English at a rate double that of students who self-place into the two-semester course, regardless of initial placement test score (Hern, 2010). The trend has continued for over a decade (Hern, 2010).

Research confirms the effectiveness of the model at Chabot College. A recent quasi-experimental study of the developmental English course at Chabot found that students who self-placed into the one semester accelerated course were significantly more likely than were students who took a developmental course alone to transfer to a four-year college. They also earned more college credits and were more likely to earn a certificate or degree, although results were mixed for ESL students (Bettinger et al., 2013; Edgecombe et al., 2014). The positive findings at Chabot have resulted in the expansion of the program. A majority of students there now enroll in the accelerated English path, which is taught by full-time faculty, part-time faculty, veteran and new instructors (Hern, 2010).

**Contextualization**

Much of the literature on developmental education underscores the benefits of embedding needed skills in relevant content. Moreover, research on knowledge transfer suggests that students are better able to apply skills to new situations when they
understand the underlying principles and procedures (Grubb & Gabriner, 2013). As a result, some practitioners have developed instructional models that focus on teaching reading, writing, and math basic skills embedded in course content (Wachen, Jenkins & Van Noy, 2011; Rutschow & Schneider, 2012). An exemplar of contextualized instruction for professional-technical students is the I-Best program in the state of Washington, which pairs a basic skills instructor with a professional-technical instructor to integrate basic skills instruction with professional or technical training (Wachen et al., 2011). This allows students to focus on the language and communication skills needed for their chosen occupation. A multivariate logistic regression analysis that controlled for characteristics such as socioeconomic status and previous schooling found positive effects for contextualized instruction. Compared to non-participating students, I-Best students were significantly more likely to advance into credit-bearing courses, persist in college, earn an occupational certificate and demonstrate learning gains on basic skills tests (Wachen et al., 2011; Rutschow & Schneider, 2012).

The benefits of contextualized instruction are not limited to technical-vocational programs. Perin (2013) conducted a review of studies that investigated contextualization as an organizing principle in academic content-area classrooms, such as science, psychology, and philosophy. Perin (2013) notes that teacher education programs have begun to include pedagogical content knowledge about embedding literacy in subject area instruction when preparing teachers, a trend she contends could substantially reduce the need for stand-alone developmental courses.

Hundreds of community colleges across the country are seeking ways to check the hemorrhage of students who begin community college with low skills (Bailey et al.,
2010; Grubb & Gabriner, 2013; Hern, 2010; National Conference of State Legislatures, 2010; Perin, 2013). Remedial reading students are especially vulnerable. A U.S. Department of Education study reported that only 17% of students enrolled in remedial reading earn a BA within eight years compared to 58% of students not requiring remediation (National Conference of State Legislatures, 2010). That figure is even more grim in California (Grubb, 2013). Yet, the cause and effect relationship is not established. Some researchers (Bailey et al., 2010) believe that students fail to persist because they must take these courses—which represent unforeseen obstacles—and others (Bailey, Jaggars, & Scott-Clayton, 2013; Grubb & Gabriner, 2013; Hern, 2010; Holschuh & Paulson, 2013; Perin, 2013; Rutschow & Schneider, 2012) blame courses that are not effective enough to support students once they encounter college-level work. The following section of this literature review will examine specific developmental classroom practices associated with positive outcomes in performance and persistence. Reading pedagogy is emphasized.

**Classroom Instruction**

The majority of students whose ACCUPLACER scores indicate the need for remediation at Chabot College in California select a one-semester accelerated course developed by Hern et al. (2010). Students at all levels read full-length books, pose critical questions, summarize, analyze, and synthesize multiple texts. Grubb and Gabriner (2013) and others (Biancarosa, 2012; National College Transition Network, 2014; Simpson & Nist, 2000) argue that the business-as-usual focus on basic skills in developmental classrooms does not strengthen student ability to think critically and synthesize information across texts, ways of thinking expected of students enrolled in college-level
courses. The National College Transition Network (2014) suggests that developmental reading students benefit from exposure to the types of text they will encounter in college courses. Caverly et al. (2004) argue that students’ success in college rests on their “ability to engage in strategic reading of extensive academic or informational text” (p. 25).

As Grubb and Gabriner (2013) and others (Paulson & Armstrong, 2010; Perin, 2013; T. Shanahan, Fisher, & Frey, 2012) point out, reading classes that focus primarily on discrete skills, such as distinguishing between the main idea and details in a series of uncontextualized graded paragraphs are poor preparation for understanding the complex text specific to various disciplines that students encounter in college. Perin, Bork, Peverly, and Mason (2013) assert that this approach provides students with a sampling of what will ensue but does not engage them in the experience of sustained reading and writing in one subject area that they will need once they enroll in a college-level course. They also suggest that developmental education instructors can provide such practice by contextualizing skills in the disciplines (Perin et al., 2013). Simpson and Nist (2000) argue that embedding reading strategy instruction in realistic context is imperative, as strategies taught in isolation have little transfer value.

Grubb and Gabriner (2013) suggest several reasons that a focus on discrete skills is the default pedagogy in many remedial reading classrooms, a teaching methodology that he dismisses as “remedial pedagogy” (p. 52). Community college instructors typically hold MAAs in their subject but have no formal pedagogical training; therefore, they teach as they have been taught. They often employ teacher-centered rather than constructivist approaches. He also points out that adjunct, or part-time, instructors often have little or no time for preparation. They receive a course outline and suggestions for
textbooks, often in the few days preceding the start of a semester. Their salaries reflect
in-class hours only. Grading papers, preparation, and collaboration with colleagues
represent unpaid hours. Grubb and Gabriner (2013) assert, “there is no culture of
appreciation for instruction” (p. 72); financial concerns, enrollments, board relations and
political survival dominate the concerns of community college administrators. The best
interests of students are not the foremost concern.

At one time reading was considered the purview of the primary grades, but the
text that students encounter and the level of understanding needed for success in college
and career have become increasingly sophisticated. The next section will examine how
reading instruction is changing to meet the challenges of college and career in the 21st
century.

**Reading Comprehension**

Reading consists of five components: phonemic awareness, or the ability to
distinguish the individual sounds in words; phonics, the relationships between letters and
word families; fluency, the ability to read smoothly enough to make sense of text;
vocabulary, or knowledge of word meaning; and comprehension, understanding of the
meaning of text (Kruidenier, 2002; Perin et al., 2013). Perin (2013) explains that
comprehension, in turn depends on the fluent operation of two components: decoding, or
accurate deciphering of words on the page, and linguistic comprehension, or the ability to
understand language. Many students enter postsecondary education settings lacking
fluency in one or both of these components.

According to a National Center for Education Statistics report (2005), 35.2% of
all undergraduate students in 2000 who were receiving financial aid (i.e., 5.8 million)
were enrolled in developmental reading courses and 11% of first-time, first-year college students nationwide (i.e., 843,000 students) received some form of developmental reading instruction. Caverly et al. (2004) outline the range of reading skills lacking among underprepared students. These include difficulty in distinguishing between important and less-important information, selecting, organizing, and interpreting multiple texts, and metacognitive awareness about which strategies to apply to repair comprehension difficulties. In a review of literature published between 2000 and 2012, Perin (2013) identified the literacy skills of underprepared postsecondary students and investigated instructional approaches designed to raise those skills to college level. Fourteen of the 43 studies in the review focused on assessment. These studies pointed to weaknesses in a wide variety of reading and writing skills including oral and written comprehension and familiarity with reading strategies. As Caverly et al. (2004) note, success in college largely depends on the ability to read strategically. In other words, students need a wide repertoire of strategies from which to draw, and they need awareness about when and how to employ those strategies to comprehend extensive academic text.

**Learning to Read Beyond Third Grade**

One of the challenges of teaching reading to college students is overcoming long-held biases on the part of both students and subject-area instructors that the reading proficiency of college students is already well-established. Holschuh and Paulson (2013) explain that the view that reading instruction is the purview of grade school is based on conventional—yet outdated—wisdom that holds that learning how to read stops around the third grade; from that point on, reading becomes a tool for learning. That is: “First
you learn to read, then you read to learn” (p. 4). T. Shanahan and Shanahan (2008) contend that this perspective is not altogether misguided. They explain that the basic skills that undergird all reading—phonemic awareness, phonics and sight vocabulary—are highly generalizable and transfer easily to more sophisticated tasks. However, as literacy tasks become more complex, what is learned becomes less generally applicable. Simply stated, the first words children learn to read (e.g., *of, is, the, stop, go*, etc.) have a place in all future reading, from the most mundane to the highly specialized. But, words learned in various contexts (e.g., science, mathematics, history, social sciences, etc.) become more constrained and specific as readers mature (T. Shanahan & Shanahan, 2008).

T. Shanahan and Shanahan (2008) explain how the notion that once someone learned to read, he or she was prepared for life’s literacy demands once made sense. The nation’s economic needs were satisfied. Those with sophisticated or highly specialized reading skills moved into jobs that required greater amounts of literacy. Factory jobs, law enforcement, and many allied health careers required less. The world is increasingly global, however, and information-based technologies have gained prominence; as a result, the pool of jobs that require little or no literacy has diminished. A 2010 report from the National Assessment of Educational Progress (NAEP) administered by the U.S. Department of Education reported that while reading scores of the nation’s 12th graders had risen slightly from an historic low in 2005, 62% of 12th graders still tested below a level considered proficient (Dillon, 2010). More U.S. jobs than ever depend upon a workforce that is able to read—and write—with competence.
between education and income underscores the need to improve the literacy of all citizens (Carnevale & Strohl, 2011; Dougherty & Kienzl, 2006; T. Shanahan & Shanahan, 2008).

It has become clear in the last several years that generic reading comprehension instruction is insufficient to prepare students for the increasing complexity, specificity, and diversity of the media, including written text, they encounter both in college and in the workplace. Moje (2008) promotes the integration of literacy instruction into the content areas to help students gain access to the accepted knowledge of the disciplines. This in turn, will allow students to critique that knowledge and take part in the bigger conversations based on that knowledge. In order to access that knowledge, however, both students and instructors need instruction in the unique set of unwritten rules that govern the way that language is used and understood in different disciplines (Fang, 2014).

**Text Complexity Simplified**

T. Shanahan et al. (2012) describe the factors that complicate text. As students move into high school, vocabulary becomes more domain-specific and complex, and sentences become longer, which complicates the task of understanding who did what to whom within individual sentences. *Text coherence* refers to how particular words, ideas, and sentences connect to each other. The authors provide the following example: “John and Mary went to space camp. They liked it there. Of course, boys often like rockets, but Mary, too, enjoyed it” (p. 60).

The first sentence tells what the children did. (They went to space camp.) In order to understand the second sentence, the reader has to recognize that *they* refers to the two children and that *there* refers to *space camp*, a simple example of a cohesive link. The
third sentence requires the reader to connect boys to John and recognize that the final it also refers to space camp (T. Shanahan et al., 2012, p. 60).

T. Shanahan et al. (2012) explain how this brief example provides just a taste of the challenges faced by adult students or second language learners when they encounter distant cohesive links, especially when reading about unfamiliar topics. T. Shanahan and Shanahan (2008) provide an example from a secondary level history text: “The enlargement of the nation’s capacity to produce weapons, the advent of the aeroplane, and the improvement in worldwide communication systems through the telegraph increased the likelihood that the United States would enter the war” (p.53).

The authors point out that events are nominalized (turned into nouns) as the subjects of the sentence (The enlargement of the nation’s capacity to produce weapons, the advent of the aeroplane, and the improvement in worldwide communications systems through the telegraph) and buried in long noun clauses. The verb (increased) is a process expressed as a verb, an abstraction that adds to the complexity of the sentence. They highlight the multiple challenges presented by this sentence, including the archaic spelling of aeroplane. After wading through this sentence, students might understand that the United States produced weapons and communications improved but could easily miss the main point—that these developments increased the likelihood of U.S. involvement in a war (T. Shanahan et al., 2012, p. 56).

**Text Organization**

Text organization is another factor that complicates reading for students in high school and college. A science experiment may be presented like a recipe in logical time-sequence, but flashback, a literary device that can be confusing for less experienced
readers, is common to both history writing and literature (T. Shanahan et al., 2012). In order to comprehend complex relationships between words and ideas presented in disciplinary text, students must recognize language that signals organizational patterns, such as cause and effect, problem and solution, and enumeration, a task often complicated by lack of relevant background knowledge or English language fluency. Students who read new information without a schema, or some prior knowledge of a topic, to which to connect new information are at a distinct disadvantage when text requires them to make inferences, understand implied meaning, and draw conclusions (T. Shanahan et al., 2012). T. Shanahan and Shanahan (2008) explain that the high level skills embedded in disciplinary text present challenges partly because the language of these texts often do not have parallels in oral language. They explain that “the texts may be highly abstract, ambiguous and subtle in addition to dealing with content that may be inconsistent with previously held ideas” (p. 45).

As educators gain clarity about the literacy needs of today’s college and workplace, the urgency to develop instructional practices to target those needs becomes clear. However, it is easier to enumerate what students lack than it is to know how to fill the gaps. Perin’s (2013) assertion that “the major finding” of her review “is that there is still much to be learned about the effects of instructional techniques intended to promote improvement” (p. 125) resonates. She asserts that the body of studies of effective reading and writing instruction for underprepared college students is small and often undermined by methodological flaws. However, even basic knowledge that characteristics of text differ between disciplines places students at a clear advantage. The exploration of those differences can be further refined as students pursue their academic interests.
The following section of this literature review will distinguish between disciplinary literacy, a growing focus of research into effective instructional practice, and content area reading, the traditional approach to reading comprehension. This section will also discuss why and how students benefit from familiarity with ways that subject matter experts—scientists, mathematicians, historians, and others—communicate and use language in their academic areas. The relationship will be clarified between functional language analysis, the tool that provides the meta-language—the language used to talk about language—and disciplinary literacy.

**Disciplinary Literacy and Content Area Literacy**

T. Shanahan and Shanahan (2012) among others (Biancarosa, 2012; Cox, Friesner, & Khayum, 2003; T. Shanahan et al., 2012) distinguish “content area reading,” which has a long and complex history from “disciplinary literacy,” a concept with more recent origins. They explain that terms are not interchangeable. “Content area literacy” refers to study skills that help students learn from subject matter-specific texts. “Disciplinary literacy,” is an “emphasis on the knowledge and abilities possessed by those who create, communicate, and use knowledge within the disciplines” (T. Shanahan et al., 2012, p. 8). Fang and Schleppegrell (2008) note that major secondary reading textbooks and popular teacher professional development materials emphasize strategies such as note-taking, summarizing, determining main ideas and identifying facts versus opinions, activities that demonstrate comprehension, rather than enhance learning, which is the goal of disciplinary literacy.

Biancarosa (2012) concurs that experience with text in the early grades is insufficient preparation for the increasing text complexity that students encounter in
middle and high school. She illustrates by considering the different expectations for
student responses in various disciplines. Physical properties, for example, are valued in
arguments in science while psychological properties are ignored. In contrast, social
science and language arts value both physical and psychological properties. Consider the
different meanings of “adaptation” in biology and psychology. The focus in biology is
physical, while the focus in psychology is mostly emotional (Biancarosa, 2012).

C. Shanahan et al. (2011) conducted an exploratory study to identify specific
features of text in three disciplines (history, science, math) as a basis for developing
appropriate literacy instructional strategies for reading in the content areas. Although
their work focused on effective strategies for instruction in secondary school, the results
have wide implications for college developmental as well as postsecondary instruction.
C. Shanahan et al. (2011) move beyond applying strategies such as summarization and
vocabulary instruction to content area text. They suggest that text within each discipline
shares specific features and ways of using language that can be taught. The study
compared reading behaviors of expert readers in history, chemistry, and mathematics, all
professors at the same university. The purpose was the identification of specific features
of literacy and literacy use in the three disciplines as a basis for developing appropriate
instructional strategies. The investigative tools included individual interviews, think-
aloud protocols, and focus-group meetings. Once reading behaviors were identified in
each of the three disciplines, the researchers conducted cross-coding to determine which
of the identified behaviors in each discipline was also employed in the other two
disciplines. The resulting analysis indicated the experts approached text in unique ways
across the three disciplines and the approaches that were common were used to different
degrees. “Close reading” or rereading is one example. The experts in the three disciplines each engaged in “close reading,” understood as careful analysis of particular words, sentences, and paragraphs. However, the mathematicians described “close reading” as weighing the implication of nearly every word, claiming that it took several hours to work their way through a journal article for the first time (C. Shanahan et al., 2011, p. 420). The researchers did not witness this type of attention to individual words amongst historians and chemists except when historians were interested in how a word suggests a particular perspective or chemists encountered information that seemed discrepant from their own work (C. Shanahan et al., 2011). The study also noted that experts in the three disciplines engaged in many of the same strategies including sourcing, or examining the source of the information; contextualization, or reading information within a certain context, corroboration, or checking for agreement across text, and paying attention to text structure and visual or graphical information. However, they used the strategies in different ways for different purposes and to different degrees (C. Shanahan et al., 2011).

**Functional Language Analysis**

Fang and Schleppegrell (2008) turn an even finer lens on disciplinary literacy by explaining how functional language analysis reveals ways in which various disciplines employ language to communicate ideas. The overriding goal is to enable students to engage more effectively in higher level literacy tasks as they learn to deconstruct the knowledge and abilities possessed by those who create, communicate, and use knowledge within the disciplines (T. Shanahan & Shanahan, 2012). Fang and Schleppegrell (2008) explain that functional language analysis provides a “meta-language” to talk about the meaning in the choices authors make as they write clauses, sentences, and texts (p. 589).
They explain that advanced disciplinary knowledge requires specialized language; everyday language is not precise enough to convey the depth of meaning found in higher-level text. Secondary level science, social studies, language arts and mathematics use language in ways that enable these disciplines to engage in interpretation, develop theories, and convey important ideas (Fang & Schleppegrell, 2008). Functional language analysis allows students to identify language patterns specific to particular disciplines and provides them with the specialized tools they need to navigate the increasingly complex disciplinary texts they encounter as they progress through school (Fang & Schleppegrell, 2008). This passage from a tenth-grade history textbook that analyzes causes of the Great Depression provides an example: “By 1929, American factories were turning out nearly half of the world’s industrial goods. The rising productivity led to enormous profits. However, this new wealth was not evenly distributed” (Fang & Schleppegrell, 2008, p. 4).

The authors point out that technical words (e.g., productivity, profits) situate the passage in economic history, but vocabulary is the minor challenge posed by this short passage. The rising productivity refers back to the statement in the previous sentence that by 1929, American factories were turning out nearly half of the world’s industrial goods. In a similar way, enormous profits is recast as this new wealth in the sentence that follows (Fang & Schleppegrell, 2008). Fang and Schleppegrell (2008) emphasize that history text frequently presents and then recasts information in this way and assert that students can learn to recognize this common pattern. Functional language analysis unveils the language patterns that function in each content area; students learn content while simultaneously learning how language is used to construct that content (Fang &
Schleppegrell, 2008). Moje (2008) suggests, “It may be most productive to build disciplinary literacy instructional programs, rather than to merely encourage content area teachers to employ literacy teaching practices and strategies” (p. 96) and calls for a secondary reading pedagogy that “builds an understanding of how knowledge is produced in the disciplines, rather than just building knowledge in the disciplines” (p. 97).

**Vocabulary Instruction**

T. Shanahan et al. (2012) suggest that ongoing vocabulary instruction focus on domain-specific words and include analysis of the connections between words. They exhort teachers to establish purpose for reading with students to alert them about where to direct their attention (T. Shanahan et al., 2012). T. Shanahan et al. (2012) encourage instructors to foster motivation and persistence so students will “hang in there and stick it out with text that they have to labor through” (p. 62). They compare the effort to physical therapy, in which pain initially predominates but ebbs once the efforts produce tangible results. By the same token, as students gain proficiency with disciplinary-specific text, that proficiency will foster independent and critical reading, crucial to success in college (Fang & Schleppegrell, 2008).

**The Intersection of Policy and Practice**

Although the necessity for sophisticated literacy skills in a world that has become global is clear, and abundant research confirms the crucial role played by effective pedagogy, there are major hurdles to overcome (Cox et al., 2003; Grubb & Gabriner, 2013; Paulson & Armstrong, 2010; Perin, 2013; Perin et al., 2013; C. Shanahan et al., 2011; T. Shanahan et al., 2012; T. Shanahan & Shanahan, 2008). First, students must
catch up by enrolling in developmental courses. Then they must keep up by reinforcing and continuing to increase their reading comprehension skills at a faster rate than their better-prepared peers (Cox et al., 2003). The long-term goal is to minimize the time and resources that students expend taking costly detours playing catch-up in developmental courses once they enter community colleges.

**Impediments**

As it now stands, instruction in developmental courses has not kept pace with knowledge about effective pedagogy. Grubb and Gabriner (2013) argue that an emphasis on “getting the right answer”—the paradigm of the remedial pedagogy model—rather than on conceptual understanding of why an answer is correct or how to interpret a reading passage does not best serve students’ interests (p. 54). In the last ten years, abundant research has described optimal instructional practices—practices that would raise literacy levels and better prepare students for the 21st century workforce. What then stands in the way of those practices being implemented full scale in real world college classrooms when thousands of students might benefit?

**Curricular Impediments**

The results of a qualitative scan at 11 colleges working to replicate high-potential instructional innovations developed at other colleges suggested that colleges were less likely to select reforms with explicit focus on classroom practice because they required the most significant individual-level change (Edgecombe et al., 2013). Since two-thirds of community college faculty teaches part-time, and part-time salaries reflect classroom hours only, implementing changes of that magnitude is complex.
Designing effective scaffolds for vulnerable students while engaging them in a relevant curriculum that entails critical reading, writing, and thinking skills is crucial. But, designing curricula that respond to student need and promote both learning and success is time-intensive. Bickerstaff and Edgecombe (2012) outline impediments to creating and sustaining faculty development that entail change in pedagogy. Faculty workloads, reliance on part-time faculty, and a culture of autonomy often stand in the way of large-scale or even departmental reforms. They suggest that the most effective faculty learning opportunities are those aligned with clearly articulated purposes, mirroring the CCCSE claim described in the introduction that both students and faculty benefit from the clear articulation of high expectations accompanied by training and support.

**Economic Impediments**

Fundamentally, the issue is one of economics. Reform takes time and time entails budget expenditure. Edgecombe et al. (2013) outline the resources necessary to launch a reform. To prepare, faculty and administrators focus on logistics, adjusting course schedules, securing classroom space, and recruiting students. The focus subsequently shifts to the delivery of new course content or traditional content in new course structures. It entails significant expenditure of time throughout the semester to create and revise assignments, assessments, and grading rubrics. All this energy reflects a high level of commitment, which is hard to expect from a part-time employee who may be juggling jobs at multiple institutions (Edgecombe et al., 2013). Grubb and Gabriner (2013) assert that if finances were not constraints, then all faculty teaching basic skills could be full-time faculty “with greater integration into the mainstream college, including access to
professional development and ongoing discussions about improvement” (p. 172).

However, as long as it costs half as much to hire a part-time faculty member as it does to hire a full-time faculty member, little incentive exists to move in that direction (CCCSE, 2014; Cohen & Brawer, 2008; Edgecombe et al., 2013; Grubb & Associates, 1999; Hern & Snell, 2013). Cohen and Brawer (2008) note that college reliance on part-time employees conforms to developments in many other sectors of the American workforce. Community college hiring practices reflect an overall trend in society to convert jobs to positions for which the employer has minimal commitment to the employee in terms of benefits or job security. Part-time teaching jobs satisfy those parameters. Two factors are undeniable. Finances are a constraint; instructional approaches that deepen learning and promote needed critical thinking skills are essential. Jenkins and Agamba (2013) assert that the key to the changes in teacher knowledge, attitudes, and beliefs that will ultimately improve student learning lies in strategic professional development. Multiple studies confirm that the quality and effectiveness of instruction are among the most important factors that affect developmental students’ academic performance (Rutschow & Schneider, 2012). Rutschow and Schneider (2012) note a gap in rigorous studies that document how different instructional practices affect student outcomes. The following section examines the issue of professional development, particularly for part-time instructors and some innovative approaches with potential to be widely scaled.

**Professional Development**

Classroom instruction lies at the heart of student success. This is particularly true for students in developmental classrooms, who commonly arrive at school with multiple challenges. Many are nontraditional students who are returning to school following
military duty or after having raised young children. Their educational backgrounds may be subpar. Some have not graduated from high school (Cohen & Brawer, 2008; Cox, 2009; Goyette, 2008; Karp & Bork, 2012; Rutschow & Schneider, 2012). These vulnerable students arrive at community college and discover that they must now navigate a labyrinth of developmental classes and sequences before they are eligible to take credit-bearing courses, an obstacle that often derails them. Part-time instructors teach the vast majority of these classes (Gerstein, 2009; Jaeger, 2008). Definitive conclusions about the effects of exposure to part-time faculty on student success are elusive, given the magnitude of variables within community college student populations (Eagan & Jaeger, 2008; Gerstein, 2009; Grubb & Gabriner, 2013; Rutschow & Schneider, 2012; Wallin, 2007). However, most stakeholders agree that developmental education poses an enormous set of both opportunities and challenges for community colleges (Gerstein, 2009). While quality of instruction is arguably the greatest of those challenges given its central role, it is the one for which community college faculty has the least preparation (Gerstein, 2009; Grubb & Gabriner, 2013). More than two-thirds of developmental reading (and other) instructors are part-time employees. The result is that the faculty assigned to teach the students most in need of research-based teaching practices, such as those that emphasize close reading of expository texts, writing from sources, collaborative conversations, and critical thinking are the least likely to have professional opportunities that promote those practices (Gerstein, 2009; Rutschow & Schneider, 2012). Professional development at community colleges is commonly characterized as haphazard, comprising periodic one-day workshops led by outside experts or informal conversations and department meetings (Rutschow & Schneider,
2012). Part-time faculty often does not participate in professional development at all, since faculty union contracts specify that part-time faculty receive compensation for any mandatory activity. Studies conclude that most professional development does little to change individual instructors’ classroom practice (Rutschow & Schneider, 2012). The students most in need of the best pedagogical practices and research-based instruction—developmental students—are the least likely to benefit from the growing understanding of what they need.

Kezar (2013) conducted a qualitative study to understand the role of department policy in shaping the performance and ability of non-tenure track faculty (NTTF), which includes part-time faculty, to create quality-learning experiences. She found clear evidence that NTTF perceive that college department policy shape their performance and ability to create quality learning experiences (Kezar, 2013). Although her study focused on NTTF at four-year institutions, it makes sense to generalize many of her concerns to the community college setting. She describes lack of input into curricular decisions and textbook choices and, key to this discussion, lack of a system for teachers to engage in discussions with colleagues about teaching, learning and curriculum (Eagan & Jaeger, 2008; Kezar, 2013). Kezar (2013) concludes that it is important to reconceptualize the issue of performance differences between part-time and full-time faculty from one that focuses on the deficits of individuals to one that focuses on institutional policy and practice. Rutschow and Schneider (2012) emphasize that rigorous research on the effects of professional development in community colleges merits attention. They point to the efforts of several California community colleges to create Faculty Inquiry Groups (FIGs) and the Southern Center on Active Learning Excellence in Virginia, which supports the
institutionalization of pedagogical practices that encourage active and collaborative learning. They contend, “Research to date clearly demonstrates that minor modifications in developmental education programs are insufficient for producing dramatic improvements in student achievement” (p. 67). Engaging the entire faculty and student support system through strategic, well-planned, coherent professional development is key to transforming the path through basic skills from “bridge to nowhere” described by Complete College America (Complete College America, 2012, p. 2) to an “avenue to anywhere.”

**Conceptual Framework**

Multiple issues contribute to the challenges involved in raising achievement, increasing persistence, and readying students to participate in a global economy once they leave high school. A framework with enough fortitude and flexibility to incorporate the interplay of policies and personalities that comprise a community college is necessary to understand the dynamics in operation, both at greater institutional and departmental levels and at the individual classroom level. Complicating the task of constructing this framework is the reality that many groups operate within it, and its success or failure depends on each of those groups in unique but interdependent ways. Two closely linked theories fulfill that function: expectancy-value theory and collective efficacy.

**Expectancy-Value Theory**

Expectancy-value theory was first proposed by Vroom (1964) to explain the goals that people set, their persistence at carrying them out, and their success at meeting those goals (Wigfield & Eccles, 2000). Expectancy refers to the beliefs that people hold about how likely they are to reach a goal (Vroom, 1964). Expectancy is an outcome of factors
such as self-efficacy, or the belief in one’s own ability to succeed at a given task, described by Bandura (Bandura, 1997), the perception one holds about the difficulty of the task, and the level of control one believes he/she holds over course of action necessary to accomplish that task. Vroom (1964) describes expectancy as the degree of certainty an individual holds that a choice will result in a certain outcome. At the community college, where students choose to pursue certain goals, expectancy is largely a function of the instructor and classroom practices. An effective instructor designs curricula in ways that enable students to master the material, therefore raising levels of expectancy. These instructors set high standards and support students in their efforts to attain those standards. An English instructor preparing students for academic endeavors that include reading and writing in the disciplines, for example, focuses on ways of communication unique to each discipline and supports students as they engage in close reading of complex text (Fisher & Frey, 2013). This focus on disciplinary literacy involves a gradual release of control from teacher to student and builds student self-efficacy, another component of expectancy.

Valance in expectancy-value theory is the value that an individual places on the outcome of an action. Vroom (1964) explains that valence is distinguished from value, as it does not represent the intrinsic value of the outcome itself. Attaining an associate’s degree, for example may hold little value for someone who aspires to a tenure-track position at a university while representing a magnificent achievement for someone who is the first in the family to attend college. Therefore, the valence varies according to the individual. Valence includes the incentives or reasons for pursuing a goal or task (Sanders & Sanders, 2006; Wigfield & Eccles, 2000). The goal may have intrinsic
value—enjoyment—utility value if it plays a role in future plans, and may entail costs, such as temporarily limiting access to other activities, which exacts an emotional toll and requires effort (Wigfield & Eccles, 2000). Students enroll in community colleges with a wide variety of goals. Some hope to transfer, others to earn associate’s degrees, or pursue vocational training in a technical field. Others enroll simply to indulge educational interests (Cohen & Brawer, 2008; Grubb & Gabriner, 2013; Sanders & Sanders, 2006). Yet, the numbers tell a narrative of high hopes and dashed dreams. Expectancy theory helps to pinpoint some of the kinks in the system.

Instrumentality is one obstacle. Expectancy theory describes instrumentality as the factors that mediate expectancy and value, or goal (Vroom, 1964). Those factors include both the abstract—the trust students place in the system—and the concrete—the plethora of policies that guide students as they navigate the community college system. Instrumentality helps explain what goes awry between the time students arrive on campus and leave before having met their goals. Whether the policies involve alignment—or lack of alignment—between high school and postsecondary institutions, between assessments and course requirements, assignment to long sequences of developmental courses, or heavy reliance on adjunct instructors disconnected from the institutions they serve, they undermine motivation and create obstacles to student success (Grubb & Gabriner, 2013).

Dee (2004) points to expectancy theory to explore questions that arise from high faculty turnover at some community colleges. Faculty turnover is counterproductive to institutional stability as a whole but also impedes the overall sense of trust that contributes to student instrumentality. Dee (2004) claims that faculty turnover decreases when structural support for innovation, autonomy, and collegial communication fulfill
expectancy. He concludes that it is incumbent upon the colleges to enact strategies that reduce faculty turnover, since high rates of turnover are counterproductive to their missions and visions. He outlines some practical suggestions: build interdisciplinary intellectual communities; use faculty teams to facilitate decision-making, and other change initiatives related to governance, curriculum and professional development (Dee, 2004). However, it is difficult, if not impossible to achieve that level of commitment from part-time faculty who are largely disconnected from the academic communities in which they operate (Grubb & Gabriner, 2013; Hern, 2010). At the same time, Dee (2004) points out that faculty bring much more than expectancies and values to the workplace. They bring a variety of personalities, dispositions, knowledge, and skills not considered in traditional theories of expectancy. Powerful leaders exploit these individual elements to intensify and strengthen collective efficacy, the second element in this conceptual framework (Dee, 2004).

**Collective Efficacy**

Bandura (1997) described collective efficacy as “a group’s shared belief in its conjoint capabilities to organize and execute the courses of action required to produce given levels of attainments (Bandura, 1997, p. 477). Bandura described teacher efficacy as a type of self-efficacy—the outcome of a cognitive process in which people construct beliefs about their ability to perform at a given level of competence (Goddard, Hoy, & Hoy, 2000). These beliefs, in turn, determine the willingness to expend effort, persistence in the face of difficulties, and resilience in dealing with failure (Bandura, 1997). Goddard et al. (2000) expanded on Bandura’s concept of individual teacher efficacy by proposing that collective teacher efficacy is a group attribute that represents more than the sum of
the group members’ individual efficacy (Goddard et al., 2000). Bandura (1997) suggests and Goddard et al. (2000) concur that collective teacher efficacy has the potential to contribute to the understanding of how schools affect student achievement. They suggest that the reciprocal relationship between school achievement and collective efficacy makes it imperative to “lead schools in a direction that will systematically develop teacher efficacy” as such efforts may indeed be rewarded with continuous growth in not only collective teacher efficacy but student achievement (Bandura, 1997, p. 483).

Bandura conceived four sources of collective efficacy, which include mastery experience, vicarious experience, social pressure, and emotional tone or affective state (Bandura, 1997; Goddard et al., 2000; Goddard et al., 2004; Tschannen-Moran & Barr, 2004). Of the four sources, mastery experiences play the key role in determining efficacy (Goddard, et al., 2004). The perception that a performance has been successful tends to raise efficacy beliefs, especially if that success is attributed to internal or controllable factors, such as ability or effort (Goddard et al., 2004), also known as locus of control. Teachers with strong efficacy beliefs create mastery instructional strategies for their students and foster cognitive development, set challenging goals, and demonstrate high levels of planning and organization (Tschannen-Moran & Barr, 2004). Schools with strong collective efficacy promote a sense of shared responsibility.

Tschannen-Moran and Barr (2004) propose, “Teachers in schools with high collective efficacy do not accept low student achievement as an inevitable byproduct of low socioeconomic status, lack of ability, or family background,” (p. 192), factors often invoked to explain high attrition and failure rates of community college students, especially those placed in developmental sequences. Bandura (1997) also identifies
vicarious experiences among key sources of self- and collective- efficacy. There are several forms of vicarious experience available to schools. Borrowing from other organizations by replicating programs that have proven successful is one way to enact vicarious experiences. Several California community colleges, for example, have replicated CAP, initiated originally at Chabot College (Hern, 2010). Colleges that have participated in collaborative discussions in preparation for developmental redesign often report unexpected benefits, including stronger alignment across the developmental and college curriculum, increased communication with students, and improved relationships between previously disconnected stakeholders, such as high schools and colleges (Hodara & Jaggars, 2014). At the classroom level, collaboration between teachers creates a climate that legitimizes help-seeking, joint problem-solving, and instructional experimentation (Tschannen-Moran & Barr, 2004). Brinson and Steiner (2007) of the Center for Comprehensive School Reform and Improvement invoke Richard Elmore’s (2000) monograph *Building a New Structure for School Leadership* to argue that a key barrier to successful and dramatic improvement to student performance is the isolation of teachers and the minimal opportunities for professional development (Brinson & Steiner, 2007).

Vicarious experiences are closely related to social persuasion, another factor among those contributing to Bandura’s (1997) concept of self-efficacy. Talks, workshops, professional development activities, and feedback about achievement inspire action; persuasion can encourage group members to innovate and overcome difficult challenges (Goddard et al., 2004). At community colleges where the majority of faculty is part-time and opportunities for robust professional development may be limited, social
persuasion is limited to brief passing conversations. Brinson and Steiner (2007) cite evidence from a low-performing elementary school in Illinois in which the principal took deliberate effort to promote collective efficacy among faculty with resulting impressive improvement in yearly progress to suggest that social persuasion is a strong force in raising student achievement.

Of the four contributing factors to either self- or collective-efficacy beliefs, the one that has received the least study is that of the emotional tone, or affective state (Goddard et al., 2004). Goddard and colleagues (2004) postulate, however, that organizations and individuals react to stress in similar ways. They propose that organizations with strong beliefs in the capability of the group can tolerate pressure and crises and continue to function, rising to the challenge of disruptive forces (Goddard et al., 2004). In this era of belt-tightening, program cuts, and high attrition, a sense of “we can do” promotes student success.

Although most researchers defer to Bandura’s (1997) four hypothesized sources of self- and collective efficacy, a literature review conducted by Klassen, Tze, Betts, and Gordon (2010) questions Bandura’s hypothesis. They contend that while Bandura’s initial hypothesis about the sources of self-efficacy has been useful from a theoretical standpoint, its investigation has not been thorough. Furthermore, they point out that research investigating teachers’ collective efficacy is generally missing in the literature. They conclude that further research in this area is sorely needed (Klassen et al., 2010).

Tschannen-Moran and Barr (2004) developed an instrument to study the relationship between collective teacher efficacy and student achievement in a Virginia middle school while controlling for socioeconomic status. They reported a significant
positive relationship between teachers’ perceptions of collective efficacy and student achievement, especially in writing. They conclude that principals, faculty in university teacher preparation programs, staff development facilitators, and school district personnel might bolster teacher performance and motivation, and thus student achievement, by attending to collective teacher efficacy (Tschannen-Moran & Barr, 2004). By extension, bolstering collective teacher efficacy at the community college level might improve outcomes for community college students. Bandura suggested and Goddard et al. (2000) later concurred that the positive effects of collective efficacy on school-wide reading and math achievement outweigh the negative relationship of low socioeconomic status on that achievement (Brinson & Steiner, 2007). Although research is thin about the contribution of collective teacher efficacy to achievement and student persistence at the community college level, a similar dynamic once students matriculate to postsecondary institutions, three months after graduating from high school might be assumed.

Ross and Gray (2006) conducted a study of 3,074 teachers in 218 elementary schools to study the relationship of transformational leadership to collective teacher efficacy. They describe the essence of transformational leadership as dedication to fostering the growth of organizational members and enhancing their commitment by elevating goals and contend, moreover, that transformational leadership entails three elements: charisma, intellectual stimulation of members, and individual consideration (Ross & Gray, 2006). Ross and Gray’s (2006) path analysis illustrated the impact of transformational leadership; they concluded that transformational leadership had direct effects on teacher commitment. At the community college level, leadership is most often manifested through the department Chairperson or Dean. Ross and Gray’s (2006) finding
that professional development and feedback from the leader play a key role in mastery experiences underscores the importance that community college leaders maintain a distinct presence to department faculty. A move in that direction may be key to increasing collective efficacy and thereby improving student outcomes.

Understanding what is taking place at the community college—for students, faculty, administrators, and staff—and how leadership improves or fails to improve the quality of instruction has the potential to benefit large numbers of community college students (Knapp, 2008). Two theories, Vroom’s (1964) expectancy value theory and Bandura’s (1997) theory of collective efficacy help shed light, both individually and jointly on the working dynamics at community colleges (Knapp, 2008). These dual lenses reflect “an enduring tension between attention to the individual and to the collective, and between ‘designs for learning’ and the actual lived experience of learners” (Knapp, 2008, p. 528).

**Chapter Summary**

The literature review that frames the background for this study is extensive. Community colleges enroll nearly half of all college students in the United States. Multiple studies document the high proportion of students from underrepresented groups. In California, the Student Success Scorecards for each community college document the ethnicity, race, age, and gender of students from each institution. The percentage of full-time students, first-generation students, and the ratio of counselors to students are available to anyone who visits the website (CCCCO, 2015).

The website also documents the percentage of full-time faculty. The minimum requirement that each developmental English, reading, or math faculty member has
earned a MA ensures that faculty members have pursued an education beyond the BA. Beyond that degree, however, knowledge about the actual content of the post-BA education of instructors is minimal. Instructors who teach developmental reading have backgrounds in a wide range of academic fields. Their exposure to education or professional development specific to the needs of adult students, many of whom are nontraditional, second language learners, or struggling with undiagnosed learning disabilities may be minimal.

The literacy needs of this global world are changing; it is imperative that instruction reflects those needs. Ample research is devoted to student backgrounds and characteristics. The gaps in student knowledge that present difficulties for students as they navigate text in their college courses are well known. This study will begin to fill in gaps in the research about teacher knowledge of evidence-based instruction specific to adult learners.

Teaching is an art. It is futile to even attempt to quantify entirely the elements that contribute to successful teaching. In the same way, a color wheel does not create an artist but helps an artist understand the relationships between colors. By assessing objective elements of what developmental reading teachers know and seeking to understand whether there are significant differences in that knowledge between instructors with different backgrounds and experiences, this study will contribute to the improvement of developmental reading instruction at the community college. That is the goal.
CHAPTER 3—RESEARCH METHODOLOGY

Attrition from community colleges is a persistent issue. A large body of research explores its root causes (Bailey et al., 2010; Russell, 2012; The Century Foundation, 2013; Rutschow & Schneider, 2012). The issue of attrition is magnified when students begin college assigned to developmental, or remedial, sequences in math, reading, and writing. At many California community colleges, two-thirds to one-half of the students who begin in remedial courses drop out before they complete a degree, certificate, or transfer (CCCCO, 2015). The designation “unprepared” relegates students potentially to one or more semesters of course work to complete English and math courses that “count” in terms of cost per unit and financial aid qualification but not in terms of units accrued toward certificate or degree.

Attrition is blamed on many factors. Some are external to the institution. Students arrive at college labeled “unprepared” or “not college ready” despite having graduated from high school or completed a GED. Nontraditional students are common. These students have been out of school for many years for various reasons, including military service, incarceration, and employment. Carnevale and Strohl (2011) describe the stratification that occurs in higher education, which results in community college student bodies composed largely of students from the lowest income groups. Community college students often juggle jobs and families and struggle to find time to complete assignments, much less finish school.

Other factors are internal to the institution. Student attrition is exacerbated by the necessity to complete lengthy remedial sequences that exhaust both resources and stamina (Bailey et al., 2010; Hern, 2010). Developmental courses are often poorly
aligned with the credit-bearing courses that ensue. Since full-time faculty generally teach the higher-level department offerings, the developmental courses themselves are often the purview of part-time instructors for whom the necessity to travel between sites leaves little time to engage with colleagues about best practices, attend department meetings, or meet with struggling students to offer additional support (Grubb & Gabriner, 2013). Community college students who might benefit the most from small classes and individual attention from instructors find themselves in large, heterogeneous class sections at the public institutions that receive the fewest per-student state resources (Carnevale & Strohl, 2011).

**Purpose**

The purpose of this quantitative study was to determine the existence of significant differences in performance on an objective measure of reading instructional knowledge specific to adults between California community college developmental reading instructors according to certain variables. Those variables included: educational background, teaching experience in the K-12 sector, employment status (full- or part-time), primary level of instruction, and the degree and nature of participation in professional development. Since all California community college reading instructors hold at minimum a MA, the study attempted to illuminate differences in performance between instructors with a MA in education or in other fields, with or without specific education in teaching reading. For the purpose of this study, professional development included participation in department-sponsored meetings or conversations related to developmental reading pedagogy, faculty-delivered activities (e.g., symposia, lectures),
visits to the classrooms of other reading instructors, outside conferences or workshops, distance learning or online courses, and university study (graduate or post-doctoral).

**Research Questions**

The following questions framed the study:

1. Are there significant differences in performance on the ARIK-A between instructors who meet the minimum qualifications to teach developmental reading with or without specific educational background in reading instruction?

2. Are there significant differences in performance on the ARIK-A between instructors whose primary level of instruction varies between the lowest and highest levels of developmental reading?

3. Are there significant differences in performance on the ARIK-A between instructors who either have or do not have experience in teaching reading or English in the K-12 sector?

4. Are there significant differences in performance on the ARIK-A between full-time and part-time developmental reading instructors?

The study also explored the following questions related to participation in professional development:

1. Are there significant differences in performance on the ARIK-A between instructors who participate in various numbers of department-sponsored professional development activities?
2. Are there significant differences in performance on the ARIK-A between instructors who consider their professional development participation germane to their teaching of developmental reading?

The final two questions explored the study’s conceptual framework:

1. Is there a significant difference in sense of collegiality for part-time and full-time instructors?

2. Is there a significant difference in the proportion of full-time and part-time instructors who claim a sense of belonging to a professional learning community within their departments?

The eight research questions were divided into three categories, each subject to an underlying hypothesis. The first category consisted of four parts, unified by the search for significant differences in performance on the ARIK-A considering the following: (a) educational background that qualifies an instructor to teach developmental reading at a California community college; (b) primary level of instruction; (c) background in teaching in the K-12 sector, and (d) full- or part-time teaching status. The second category addressed the question of significant differences in performance on the ARIK-A from the perspective of professional development. This category considered two factors: (a) the number of activities sponsored by the department in which an instructor has participated within the last 12 months, and (b) whether or not instructors consider their professional development participation germane to their developmental reading instruction. The third category considered two subjective constructs: (a) whether an instructor’s sense of collegiality is significantly dependent on teaching status, and (b)
whether the proportion of instructors who believe they are part of a professional learning community on campus varies according to teaching status.

**Category I Hypotheses**

1. California reading instructors who meet the minimum qualifications to teach reading with educational backgrounds that include specific instruction in teaching reading will score significantly higher on the *ARIK-A* than instructors without specific reading background.

2. Instructors with either current or past background teaching reading or English in the K-12 sector will score significantly higher on the *ARIK-A* than instructors without that background.

3. Instructors who teach mostly at the highest levels of developmental reading (accelerated, integrated, or one level below college-level) will perform best on the elements included in the Advanced Reading Global Score (ARGS) (Vocabulary and Comprehension).

4. Full-time instructors will perform significantly better than part-time instructors on the *ARIK-A*.

**Category II Hypotheses**

The second category concerned two elements of professional development and the *ARIK-A*:

1. Those instructors who participate in five or more professional development activities sponsored by their departments will score significantly higher on the *ARIK-A* than will those who participate fewer than five times in the same period.
2. Instructors who consider their participation in professional development germaine to their teaching will perform significantly better than instructors who do not value their participation to the same degree.

**Category III Hypotheses**

Two research questions comprised this category, and both relied on subjective constructs. The purpose of both questions was to explore the conceptual framework that underlay this study, that of expectancy-value theory and collective efficacy (Bandura, 1997; Vroom, 1964). The hypotheses here reflected the consensus in much of the literature (Complete College America, 2012; Grubb, 1999; Grubb & Gabriner, 2013; Tam & Jacoby, 2009; Rutschow & Schneider, 2012).

1. Full-time instructors will report a significantly greater sense of collegiality than part-time instructors.

2. The proportion of full-time instructors who report a sense that they belong to a professional learning community at their institutions will be significantly greater than the proportion of part-time instructors.

The following sections of this chapter will describe the research design and its rationale. This will include a description of the participants and an explanation of the process by which they were identified. The population sample, instrumentation, and process of developing the demographic survey will also be described. Finally, the chapter will explain the analysis procedures. A chapter summary will review the dual theoretical lenses through which the results were analyzed.
Research Design

The foundation of this quantitative study and the interpretation of its results are structured by two worldviews, both shaped by long experience as an educator in classrooms that span kindergarten through community college. Though the epistemologies are considered distinct, it would be disingenuous to pursue a study based on one to the exclusion of the other. Post-positivism is based upon the traditional belief that the scientific method can be wielded to pursue certain objective realities, with the caveat that claims of absolute truth are irrational when studying the behavior and actions of humans (Creswell, 2009). Post-positivism is most closely associated with a quantitative study, since it encompasses the collection of data and works to explain causal relationships through analysis of that data (Creswell, 2009). The post-positive worldview, therefore is ideal for posing questions, advancing hypotheses, and working to either confirm or refute those hypotheses with data, such as the objective assessment employed in this study (Phillips & Burbules, 2000).

However, the interpretation of those results by the researcher also incorporates elements of a social-constructivist worldview. While the questions in the multiple-choice assessment portion of the study were developed to elicit correct or incorrect answers, the overall meaning of those results must be interpreted through a social and historical lens that addresses the cultural norms and experiences of the participants and the particular biases and background of the researcher (Creswell, 2009). These two worldviews work in tandem. A reliable, validated instrument was used to collect data for this study, and the results were interpreted from the unique perspective of a practitioner-researcher with experience as a part-time developmental reading instructor, whose professional
development at the institution of employment has been limited by time constraints and availability, and whose classes are filled with students with widely variant academic needs.

**Data Collection**

A survey is an invaluable research tool for efficient collection of information (Dillman, 2000). This study entailed the collection of information from developmental reading instructors at the 72 community college districts in the state of California, an undertaking that would have been impractical had it depended upon personal visits to the 112 individual institutions that comprise those districts. Moreover, the survey employed for this study consisted primarily of a standardized instrument for which its developers provided consent to import into Qualtrics, an online survey application, in order to facilitate its electronic administration.

The researcher added additional questions to the survey to determine independent variables, including length of teaching tenure, employment status, primary level of instruction, and educational background, including professional development. Since basic skills instructors at California community colleges hold a MA at minimum, several survey questions were designed to determine the degree of professional development participation focused specifically on developmental reading instruction within the past 12 months. Cross-sectional data were collected during the Fall 2015 semester from developmental reading instructors in the state. Names and emails were collected via a hand-search of Spring 2015 class schedules from each community college. When the Spring 2015 class schedule yielded fewer than five names, which was the case at some of the smaller, single college districts, it was necessary to consult the Fall 2014 schedules.
Participants were invited to complete the self-administered instrument at a time and place that was most convenient. They were advised to allow approximately 45 minutes to complete the survey (see Appendix B).

A single-stage sampling procedure was employed (Creswell, 2009). The process by which participants were identified varied by college. The first step entailed a consultation of the college catalog to determine the course numbers of developmental reading classes and the department that offered the developmental reading classes. Reading is an independent academic department at some colleges; at others, reading is subsumed within the English department. Once the course numbers were determined, a hand-search of the class schedules ensued. Names of instructors are commonly listed after each class section. A search of the faculty/staff directory then yielded email contact information. Some colleges provided only blind email links, which were utilized to send the initial invitation to participate in the study. The population was not stratified as the decision was made to compile the database and invite as many participants as possible from the full population. The researcher decided that a population from the entire state of California that consisted of reading instructors from rural, urban, and suburban; small, midsize, and large; single college and multi-college districts would increase generalizability to community colleges throughout the United States. The number of reading instructors varies according to the size and location of the institution. The total population comprised about 2000 instructors, all who teach developmental reading from one to four levels below the first credit-bearing English class. The numbers of instructors at each district ranged from 5 to 90.
Population and Sample

The survey ultimately yielded 373 responses, though many fewer included valid data. A visual scan revealed that many participants had begun or even completed the demographic portion of the survey but did not complete the standardized assessment portion. About 100 participants were eliminated for this reason. Almost 100 of the remaining respondents skipped questions within the standardized assessment. Since each scale comprised only 14 questions, and only two of the five scales (vocabulary and comprehension) were employed in the subsequent analyses, participants who had skipped even one question in those two scales were eliminated from the dataset. Thus, the final analyses were conducted on 124 participants.

Instrumentation

*The Assessment of Reading Instructional Knowledge-Adults* developed by Ziegler, McCallum, and Bell (2012) is a standardized assessment tool designed for administration to adult and adolescent educators. It was developed as a pre- and post- assessment for use within a professional development context and thus includes two alternate forms (A and B). The *ARIK-A* is based upon the work of the Adult Literacy Research Working Group, convened by the National Institute for Literacy (NIFL) and the National Center for the Study of Adult Learning and Literacy (NCSALL). It was developed as a tool to assess the knowledge of teachers and volunteers who work in an adult literacy setting. These settings vary widely and include libraries, community-based organizations, social service agencies, faith-based organizations, and correctional facilities as well as community colleges. The individuals who provide reading support in these settings vary from part- or full time teachers to volunteer tutors with or without college degrees (Bell et al., 2013).
The ARIK-A consists of four sets of 14 multiple-choice items that reflect the components of reading highlighted in *Research-Based Principles for Adult Basic Education Reading Instruction* (Kruidenier, 2002): alphabets (phonemic awareness and word analysis), fluency, vocabulary and comprehension. Each set of questions results in an individual scale score. A fifth set assesses instructor knowledge of assessment. The assessment set consists of two stand-alone items and 12 items that are embedded in the other four sets. According to the authors, approximately one-third of the items assess factual knowledge, such as definitions of terms related to reading instruction (Bell et al., 2013). For example, one item assesses knowledge of the term *direct instruction*. Two-thirds of the items assess application of knowledge. For example: *How might direct instruction be applied in the classroom setting?*

The ARIK-A yields an overall, or composite, score, the Reading Instructional Knowledge Composite (RIKC), a score for each of the five scales, and composite scores for two sets of combined scales: the Basic Reading Global Score (BRGS), which combines the scale scores for Alphabets and Fluency, and the Advanced Reading Global Score (ARGS), which combines the scale scores for Vocabulary and Comprehension. The assessment takes from 30 to 45 minutes to complete. The authors describe the process used to establish reliability: “To determine internal consistency, coefficient alpha reliabilities were calculated for each scale, the global scores, and the composite scores. These values are moderately high to high, ranging from .73 (Fluency scale) to .91 (ARIK-A composite)” (Ziegler, McCallum, & Bell, 2009, p. 135). Content validity has been defined as the extent to which a test’s items actually represent the domain measured (Salvia, Ysseldyke, & Bolt, 2010). To ensure content validity, the
authors developed a test blueprint to guide item writing. In addition, a team of five adult literacy professionals with expertise in instruction and/or assessment reviewed each item for accuracy (Ziegler et al., 2009). The standardization of the instrument involved the recruitment of full- and part-time instructors and volunteers from four regions of the country: Northeast, Southeast, Midwest, and West. Four hundred and sixty eight participant packets were returned for analysis, representing a 50% return of the 994 assessment packets distributed.

The ARIK-A is a valuable tool for the current study, as it is the only nationally-normed instrument designed to assess instructional knowledge held by reading instructors who work with adults. Furthermore, the authors cite community colleges among the settings at which adults with low literacy may seek instruction. The current study, however, differs from the standardization sample in some important ways. While the educational background of adult literacy instructors and volunteers in the norm sample vary widely, all California community college instructors hold a MA at minimum. Furthermore, the literacy needs of adult students in general encompass a wide range: from a desire to study for citizenship, improve English language skills, better satisfy the needs of family, earn a GED, etc. Students who enroll in developmental reading courses at a community college, on the other hand, generally aim for associate’s degrees, vocational certificates, or transfer to four-year institutions. Thus, developmental reading instruction at a community college leans more heavily toward instruction of vocabulary and comprehension, the components that comprise the Advanced Reading Global Score. Components that comprise the Basic Reading Global Score—phonemic awareness and
fluency—figure less prominently as learning objectives in community college reading courses.

Although earlier versions of the ARIK-A included questions about participant demographics, the version employed in this study consisted solely of 58 questions to assess knowledge. In the current study, the ARIK-A served as the dependent, or outcome variable in the majority of analyses. Demographic data, which comprised most of the independent variables, were captured through 30 additional survey questions added by the researcher to the Qualtrics survey (Appendix C). These data included questions to determine instructor ethnicity, length of teaching tenure, employment status, primary level of developmental reading instruction, and discipline in which the MA or other advanced degree was earned. Four questions captured the amount and nature of professional development, specific to the instructional needs of community college developmental reading students. These questions were adapted from a survey developed by the Foothill-De Anza Community College District as part of a multi-year study that began in 2005 designed to improve student performance and inspire pedagogical excellence (Gerstein, 2009). The Foothill De Anza Faculty Survey was administered at that time to both new and tenured faculty primarily to determine the primary sources of and time spent engaged in professional learning. The researcher accessed the survey by navigating to the survey link in Gerstein’s (2009) article.

Sherry Bell provided permission to the researcher to use the Arik-A for this study and to import the assessment into the online survey tool Qualtrics to facilitate its electronic administration.
Survey Administration

The survey was administered via Internet using a four-phase administration process. The Tailored Design Method entails an advance-notice letter to all members of the sample with an introduction to the researcher and an explanation of the study (Dillman, 2000). A second email followed a few days later, which included a link to the survey. A third contact one week later sought to encourage participation by nonrespondents. A final email was sent four weeks following the initial contact to thank participants and offer one last opportunity to respond (Creswell, 2009; Dillman, 2000). Since the results of the survey were anonymous, all participants and nonrespondents received the four contacts, since there was no way of tracking individual participation.

Data Analysis

The analyses included independent sample t-tests, ANOVAs, and a chi-square analysis. Independent sample t-tests were conducted to evaluate whether performance on the Advanced Reading Global Scores (ARGS) differed significantly for faculty with and without experience teaching reading in the K-12 sector, for part-time and full-time faculty, and for faculty who did or did not consider professional development germane to their classroom instruction. In each case, the ARGS served as the dependent variable. An independent sample t-test was also conducted to determine whether sense of collegiality and sense of belonging to an academic learning community within the department could be attributed to employment status. In the latter two cases, sense of collegiality and sense of belonging to a professional learning community served as the dependent variables and employment status served as the independent variable. ANOVA analyses were conducted to determine whether significant differences in performance on the ARGS could be
attributed to educational background, including specific instruction in teaching reading, primary level of instruction, and degree of participation in professional development. The independent variable “educational background” included three levels: (a) MA in education with specialization in teaching reading; (b) advanced degree (MA, PhD or EdD) with 12 units of teaching reading and (c) advanced degree without special training in teaching reading. The independent variable “primary level of instruction” included three levels: (a) accelerated or integrated; (b) one or two levels below college-level; (c) three or four levels below college-level. The independent variable “degree of participation in professional development” also included three levels: (a) 1-2 times in the past 12 months; (b) 3-4 times in the past 12 months; (c) more than 5 times in the past 12 months. Follow-up tests were conducted to evaluate pairwise differences between the means of each independent variable.

**Role of the Researcher**

The decision to undertake this study was the consequence of the researcher’s four-year tenure as an adjunct (part-time) developmental reading instructor at a community college in Southern California. A MA as a reading specialist with an emphasis on adult literacy from an out-of-state institution required application for equivalency, as that degree was outside the parameters of minimum qualifications determined by the CCCCO (2012). The equivalency was granted; one week before the start of the Fall 2011 semester, she was assigned to teach three different levels of developmental reading.

The challenges were many. Students’ overall reading proficiency was low; their strengths and weaknesses covered a broad spectrum. Many struggled with cognitive academic language proficiency (CALP) as defined by Jim Cummins (Diaz-Rico & Weed,
2006). Though fluent in conversational English, their lack of familiarity with academic language made it difficult for them to engage in conversations about text (Diaz-Rico & Weed, 2006). When students read aloud from text, they struggled with fluency. Vocabulary was an overriding issue. In general, students struggled with the discourse of college overall (Rose, 1989). Recent high school graduates were inexperienced at maintaining the organization and self-discipline to manage homework, complete out-of-class reading, review for tests and quizzes, or participate in collaborative discussions about text. The researcher was baffled by the apparent disconnect between students’ life goals—careers, transfer to four-year institutions, vocational certificates—and their habits of mind concerning school. In addition, increasing familiarity with the challenges of teaching this population increased concerns about the general lack among colleagues of specific educational background in teaching reading to adults.

Several years before earning the MA as a reading specialist, the researcher had completed a clear California reading certificate through a university extension program certified by the California Commission on Teacher Credentialing. The program required completion of 20 units of classwork in reading pedagogy; not one of those units was devoted to adult reading instruction. From the perspective of personal experience and familiarity with the research, it seems clear that the challenges of teaching reading to adults differ in salient ways from the challenges of teaching reading to younger students (Kruidenier et al., 2010; McShane, 2005), though that lack of that knowledge is not wholly implicated in the high rates of attrition. Affective factors are also culpable (Cox, 2009; Grubb & Gabriner, 2013; Hern & Snell, 2013; Holschuh & Paulson, 2013). Lack of effort sometimes masks fear of failure (Cox, 2009). For many reasons, the issue of low
completion rates at the California community colleges has been a persistent, particularly for those students who begin college assigned to remediation.

**Limitations**

In any study, some limitations are unavoidable. While the hand-search of 112 community colleges was exhaustive, instructor contact information was not always publicly accessible. Contact information for part-time instructors is especially difficult to gather. Instructors are often busy; a request to engage in a 45-minute assessment from an unknown researcher may have limited responses. Time constraints also imposed some limitations, as the invitation to participate was distributed at the beginning of the fall semester, a busy time. Some limitations may have resulted from the instrument itself, as instructors may have resisted answering questions that focus on the fine points of instruction in alphabetics; the components of alphabetics, which include phonics, phonemic awareness, and sight words are topics more relevant to adult basic education than community college developmental reading. Correct responses were not provided.

**Chapter Summary**

Perhaps full implementation of the CCSS in K-12 will improve the levels of preparation in basic skills for matriculating community college students. Nonetheless, nontraditional students will always arrive at community colleges having missed out on important aspects of college preparation (Barnett & Fay, 2013). I do have a bias. I believe that the onus of responsibility for instructor preparation lies with the colleges, including the departments, divisions, and individual instructors to ensure that the pedagogy employed is up-to-date and relevant to adult students, the professional development is robust and ongoing, and that the environment is one that supports instructors, both full-
and part-time. Those beliefs underlie the social constructivist lens that informs the analysis of the data collected. That lens contributes to the researcher’s overall understanding of the quantitative results; the results alone, however, still tell an interesting story.
CHAPTER 4—DATA ANALYSIS AND RESULTS

The purpose of the quantitative study portion of this dissertation was threefold. First, the study was designed to assess the instructional knowledge held by California community college developmental reading instructors in five areas identified by the Adult Literacy Research Working Group (ALRWG) in collaboration with the National Center for the Study of Adult Learning (NCSALL) as essential to effective research-based instruction to adults with low literacy (Kruidenier et al., 2010). For this purpose, the study utilized the Assessment of Reading Instructional Knowledge-Adults (ARIK-A), a standardized, validated instrument developed by Bell and colleagues (2013) to assess knowledge of reading instruction that targets adult students with low literacy. The ARIK-A consists of five scales that correspond to the five areas considered crucial by the ALRWG: knowledge of the purposes of assessment and instruction in alphabetic, comprehension, fluency, and vocabulary, specific to adults.

The second purpose of the study was the collection of demographic information about California community college developmental reading instructors. Survey questions were designed to determine instructor ethnicity, age, teaching status (full- or part-time), educational background, primary level of instruction, and whether or not instructors either currently teach or have in the past taught reading or English in the K-12 sector. The region of the state in which participants’ colleges are located was also identified. In addition, many of the demographic questions sought to understand the types of professional development available to instructors and the levels of their participation in these activities.
The third purpose was the exploration of the conceptual framework that underlay this study. In the current political climate, the dismal completion rates at community colleges are often highlighted (Bailey & Cho, 2010). The focus of the criticism is multi-pronged. A common target is developmental education, often seen as a barrier rather than a support (Complete College America, 2012). Many questions are unresolved about where to place the blame and how best to reverse that trend. Two research questions broached this topic, both intended to assess differences between part-time and full-time instructors in noncognitive factors identified as potential elements in teaching effectiveness.

Independent sample t-tests and ANOVAs were the primary analyses employed in the eight analyses that comprised this study. One chi-square analysis was conducted to determine the existence of significant differences in the proportion of full-time and part-time instructors who consider themselves part of a professional learning community within their departments.

The survey was disseminated via Qualtrics to 1795 participants using the Tailored Design method (Dillman, 2000). Potential participants were identified by a hand-search of each of the 2015 catalogs and spring class schedules of the 112 California community colleges. The number of potential participants is approximate, since many instructors teach at multiple colleges and have more than one email address, which resulted in duplicates. An initial email was distributed in early September 2015 to alert potential participants of the imminent invitation and survey dissemination. Three reminder emails timed about one week apart were subsequently distributed (Dillman, 2000). The initial survey and the first two reminders were sent via Qualtrics. The survey was disseminated
in mid-September once the fall 2015 semester had been underway for a few weeks. A final reminder was sent in early October over the period of a week, with 50-100 individual email letters per day generated and distributed from the personal email addresses of the researcher. According to Qualtrics, 373 (20 %) surveys were opened by the end of October; ultimately, 246 surveys were completed.

Within this chapter, the data analysis procedures are described in detail. First, the data screening methods are described. This section will describe the rationale for primary focus on the Advanced Reading Global Scale (ARGS) in the ARIK-A, which comprises two of the five scales: vocabulary and comprehension. Next within the chapter is a discussion of the hypotheses related to categories I, II, and III. Each hypothesis and its related claims will be examined and discussed. Detailed explanations about steps taken to conduct the analyses given the varying numbers of responses to individual questions are discussed in the context of each analysis.

Data Screening

For this study, the ARIK-A was one part of a two-part survey, which was then embedded in Qualtrics for electronic administration. The ARIK-A is divided into five scales. Four of the scales consist of 14 multiple-choice items each: alphabetic, fluency, comprehension, and vocabulary. The assessment items are conflated within the first four scales with the exception of two stand-alone assessment items, resulting in 58 items in total. There were four possible answer choices for each item. Questions were equally weighted: a correct answer received one point; an incorrect answer received zero points. Two global scores could be calculated from the five scales. The Basic Reading Global Score (BRGS) is the sum total of the Alphabetic and Fluency scales (28 points possible);
the Advanced Reading Global Score (ARGS) is the sum total of the Comprehension and Vocabulary scales (28 points possible). Since the foremost purpose of the ARIK-A is to illuminate areas in of weakness in instructional knowledge to inform professional development, the developers of the instrument do not suggest a cutoff score to indicate adequate or inadequate levels of knowledge.

Questions in the ARIK-A portion of the survey were re-ordered to allow instructors to address those areas first most relevant to community college reading instruction. Thus, comprehension and vocabulary appeared first and second respectively, rather than fourth and fifth as they appear in the original version. In particular, many instructors by design did not address questions related to alphabetics or fluency. In order to focus the survey on the areas most relevant to community college instructors, skip logic was employed. Participants skipped the section that assessed knowledge of teaching fluency if they replied, “No,” to the question “Have any of your assigned reading sections within the last year included fluency as a student learning outcome?” Participants skipped the section that assessed knowledge of teaching alphabetics if they replied, “No,” to the same question about teaching phonics. Only 13 instructors thus responded to questions that provided a score on both Alphabetics Instructional Knowledge score (AIK) and Fluency Instructional Knowledge score (FIK), which together yield the Basic Reading Global Score (BRGS). Questions that comprise the Assessment Knowledge score (AK) are mostly embedded in the five scales; thus it was also not possible to determine a Reading Instructional Knowledge Composite (RIKC) for the majority of participants. Since data were missing for the alphabetics and fluency scales as well as the assessment items that were conflated in those areas, only the Advanced Reading Global Score
(ARGS) was utilized in the analyses in which the ARIK-A functioned as the outcome variable; instruction in vocabulary and comprehension is relevant to all instructors who completed the survey. However, significant data were missing even from those two scales. As each scale consists of only 14 questions, participant data were not included if the participant had skipped even one question among the 28 questions that comprised the ARGS. Valid data were available for 124 respondents for analyses in which the ARGS served as the dependent variable.

Results

The survey sought to determine demographic information about the overall population of California community college reading instructors. Even here, however, missing data were prevalent, yielding assorted numbers of total responses. A summary of responses illustrating the inconsistent number of responses to individual demographic survey questions is illustrated in Table 1. For example, 164 (80%) of respondents were female and 41 were male (20%), a total of 205 responses. The question about the number of years teaching developmental reading yielded 207 responses: 143 (69%) reported teaching tenures of five or more years, 59 (29%) reported teaching developmental reading for between one and five years, and five (2%) instructors reported teaching developmental reading for less than a year. Forty-one respondents (20%) teach in the Bay Area; fifty-five respondents (27%) reported from the Los Angeles region; thirty-two (16%) respondents reported from each of the Central Valley and San Diego regions; nine (4%) reported from the Central Coast region; eight (4%) responded from Orange County; seven instructors (3%) reported from each of the North Coast, Inland Empire, and Desert
Table 1

Summary of Responses to Demographic Questions

<table>
<thead>
<tr>
<th>Variable</th>
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<th>%</th>
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</thead>
<tbody>
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<td><strong>Sex</strong></td>
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<tr>
<td>Female</td>
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<td>Male</td>
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<td>Asian Pacific Islander</td>
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<td>1.5</td>
</tr>
<tr>
<td>Native American</td>
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<td>1.0</td>
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<tr>
<td>Other</td>
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<td><strong>Years Teaching Developmental Reading</strong></td>
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</tr>
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<td><strong>Location</strong></td>
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<td>San Diego</td>
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<tr>
<td>Part time, adjunct</td>
<td>107</td>
<td>51.9</td>
</tr>
<tr>
<td>Full-time, non-tenured</td>
<td>18</td>
<td>8.7</td>
</tr>
<tr>
<td>Full-time, tenured</td>
<td>81</td>
<td>39.3</td>
</tr>
<tr>
<td><strong>Freeway Flyers</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>63</td>
<td>32.1</td>
</tr>
<tr>
<td>No</td>
<td>133</td>
<td>67.9</td>
</tr>
</tbody>
</table>
regions. Two instructors (1%) participated from each of the Shasta Cascade and Gold Coast regions. There were 202 total responses to this question.

Instructors were asked to supply their ages. The youngest reported 26 and the eldest reported 71. There were 196 responses altogether. A visual scan of the text-entered responses indicated a near-even distribution of instructors in their forties, fifties, and sixties, fewer in their 30s, and even fewer in their 20s and 70s. The final analyses did not employ this variable.

The majority of participants (N=154, 76%) were Caucasian (non-Hispanic); the remaining reported Asian Pacific Islander (N=12, 6%), Latino or Hispanic (N=11, 5%), African American (N=3, 1%), Native American (N=2, 1%). Ten percent (N=20) reported “other.”

Of the 206 responses to the question about job status, 107 respondents claimed part-time status, 81 identified as full-time tenured, and 18 identified as full-time nontenured. Another question addressed the common notion that part-time adjuncts might accurately be characterized as “freeway flyers” for their tendency to teach at multiple campuses. More than twice as many instructors reported that they do not teach at multiple campuses as those who do (133 vs. 63). However, a cause and effect relationship between job status and employment at multiple campuses could not be determined from the data.

The following sections examine the results in each of the primary categories.

Category I Results

The following hypotheses were tested in this category:

1. California reading instructors who meet the minimum qualifications to teach reading with educational backgrounds that include specific instruction in
teaching reading will score significantly higher on the ARIK-A than instructors without specific reading background.

2. Instructors with background teaching in K-12 will score significantly higher on the ARIK-A than instructors without that background.

3. Instructors who teach mostly at the highest levels of developmental reading (accelerated, integrated) will perform best on the elements included in the Advanced Reading Global Score (ARGS): Vocabulary and Comprehension.

4. Full-time instructors will perform significantly better on the ARIK-A than part-time instructors.

**Specific reading background.**

The CCCC0 mandates that reading instructors may meet minimum qualifications to teach developmental reading in one of several ways. A MA in education with specialization in the teaching of reading is the most prevalent category currently, although there are several other options. An instructor might possess a BA in another field plus a MA in English, literature, creative writing, psychology, linguistics or applied linguistics, or Teaching of English to Speakers of Other Languages (TESOL) and have completed 12 additional units in teaching reading. Instructors also qualify to teach reading by applying for equivalency. In such cases, the human resource department at the college reviews the educational background and previous job experience of individual applicants to determine eligibility. As shown in Table 2, of 206 responses to the question that concerned minimum qualification, 78 (38%) respondents met the minimum qualifications by earning a MA in education with a specialization in reading. Eighteen respondents (9%) qualified with a BA in another field, a MA in English, and 12 units in
Table 2

*Respondents’ Educational Background*

<table>
<thead>
<tr>
<th>Description</th>
<th>n</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>MA in Education with Specialization in Reading</td>
<td>78</td>
<td>37.8</td>
</tr>
<tr>
<td>BA in another field, MA in English, 12 units of Teaching Reading</td>
<td>18</td>
<td>8.7</td>
</tr>
<tr>
<td>BA in another field, M.A. in literature or TESOL, 12 units of Teaching Reading</td>
<td>6</td>
<td>2.9</td>
</tr>
<tr>
<td>Other</td>
<td>87</td>
<td>42.2</td>
</tr>
</tbody>
</table>

*Note.* There were 206 total responses.

the instruction of reading. Six respondents (3%) each qualified with a BA in another field, a MA in literature or TESOL plus 12 units of teaching reading. Seven met the minimum qualifications with BAs in other disciplines and a MA in linguistics; four qualified with MAs in creative writing plus 12 units of teaching reading. However, 87 (42%) of respondents marked “other” and described their qualification in narrative form. These responses varied widely. Many instructors claim doctorate degrees (EdD or PhD), either with or without specific instruction in the teaching of reading. Instructors reported qualifying with MFAs in creative writing and degrees in literature or philosophy. A few claim no specific academic qualification to teach developmental reading. Eligibility for those hired in the early 1990s or earlier did not include the requirement for specific instruction in the teaching of reading. Several respondents had completed training in Reading Apprenticeship (RA), a program developed by the Strategic Literacy Initiative at
WestEd, a nonprofit research agency in California. RA is built upon a framework that includes four dimensions—personal social, cognitive, and knowledge-building—to help readers develop the knowledge, strategies, and skills necessary for proficient reading (Schoenbach, Greenleaf, & Hurwitz, 1999).

One instructor listed a PhD in reading and another a PhD in language development. One responded: “MA in English literature plus 35 years as a professional writer in journalism, public relations and screen/TV drama” (Participant, personal communication, October 12, 2015). This variable was later collapsed, recoded, and renamed (SPECRDGBKRN) to indicate whether instructors had obtained their post-baccalaureate degrees in education or another academic area and whether their educational background did or did not include specific training in reading instruction. The new variable included three levels: MA in education with specialization in teaching reading; MA, PhD, or EdD in an academic discipline other than education with 12 units specific to instruction in the teaching of reading, and MA, PhD, or EdD in an academic discipline other than education without specific instruction in the teaching of reading.

The new variable was used as the independent variable in an ANOVA to determine whether significant differences existed in performance on the ARGS between instructors who met the minimum qualifications in one of these three ways. Levene’s test for equality of variance was significant (p = .013) indicating a violation of the assumption of homogeneity of variance. A Welch ANOVA was subsequently conducted, which is robust to violations of homogeneity of variance, and the results were significant (f = 5.849, p = .005). The effect size as assessed by eta squared was .075 (η² = .075), a medium effect size. Post hoc tests were conducted using the Tukey procedure to examine
pairwise differences between factor means. Significant differences in performance on the ARGS were found between instructors with a MA in education with a specialization in teaching reading and instructors with a MA or doctorate in another subject both with or without specific instruction in teaching reading. Mean scores for instructors with a MA in education with a specialization in reading were 1.98 points higher than those of instructors with a MA or doctorate in another subject with at least 12 units of specific instruction in teaching reading (p = .019) Mean scores for instructors with an MA in education and specialization in reading were also significantly higher (1.90 points) higher than those of instructors with a MA or doctorate in another field without specific instruction in teaching reading (p = .035).

**Experience in the K-12 sector.**

Responses to the question “Do you now or have you ever taught reading or English in the K-12 sector yielded 195 responses. Ninety-two instructors (47%) responded in the affirmative, and 103 (53%) in the negative. An independent samples t-test was conducted to evaluate the hypothesis that instructors with current or past experience teaching in the K-12 sector would perform significantly better on the ARGS than instructors without that experience. The sample included 123 participants with valid data: sixty-two reported having experience in K-12; sixty-one reported no experience teaching in K-12. The test was significant, t(121)=1.985, p= .049. Instructors with experience in K-12 (M = 18.5, SD = 3.24) performed significantly higher on the ARGS than did instructors without K-12 experience (M = 17.2, SD = 3.75). The 95% confidence interval for the difference in means ranged from .003 to 2.50. Cohen’s $d = .371$, a medium effect size.
Primary level of instruction.

Survey respondents identified their primary level of instruction (Table 3). There were six possible responses on the original survey. Seventy-five instructors claimed most frequently to teach one level below college-level (37%), while fifty-three respondents (26%) identified “two levels below college-level” as their primary level of instruction. Forty-one respondents (20%) selected the option “integrated reading and writing,” a possible reflection of the current trend at many California community colleges to shorten remedial English and reading sequences by combining these disciplines. Seven respondents (3%) reported “accelerated reading” as their primary level of instruction. Twenty-one instructors (10%) identified developmental reading at three levels below college-level as their primary level of instruction; three instructors (1.5%) selected the option “four levels below.”

Table 3

Primary Level of Instruction

<table>
<thead>
<tr>
<th></th>
<th>n</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>One Level Below College Level</td>
<td>75</td>
<td>37.5</td>
</tr>
<tr>
<td>Two Levels Below College Level</td>
<td>53</td>
<td>26.5</td>
</tr>
<tr>
<td>Three Levels Below College Level</td>
<td>21</td>
<td>10.5</td>
</tr>
<tr>
<td>Four Levels Below College Level</td>
<td>3</td>
<td>1.5</td>
</tr>
<tr>
<td>Accelerated Reading</td>
<td>7</td>
<td>3.5</td>
</tr>
<tr>
<td>Integrated Reading &amp; Writing</td>
<td>41</td>
<td>20.5</td>
</tr>
</tbody>
</table>
The independent variable for this question was collapsed into three categories for the purpose of analysis. Integrated reading and writing and accelerated reading were combined into one category (N=33). One and two levels below college-level comprised a second category (N=74) and a third category combined three or four levels below college-level (N=16). The decision to collapse the levels in this way was justified by the knowledge that instructors who teach integrated reading and writing or accelerated reading most often target their instruction to students who have not reached college-level proficiency on the placement test but are believed to stand a good chance of successfully navigating college-level text after one semester of intense, focused instruction. In the same way, students assigned to three or four levels below college-level typically struggle in similar ways, thus benefit from more intensive focus on vocabulary, fluency, and discrete skill instruction, although research differs about how best to balance that instruction.

Instruction directed toward students placed at one or two levels below is also similar, though the actual course content and structure of individual sections of the same course may vary widely, even at the same college. Some instructors contextualize reading instruction in content or disciplinary text, while others focus primarily on discrete skills, such as locating the main idea and making inferences, curriculum organized sequentially in reading textbooks. Many textbook series developed for this purpose target these levels, and their content is virtually identical. At any rate, the operating assumption was that instruction at one or two levels below college-level is essentially the same.

An ANOVA was then conducted to determine the existence of significant differences in performance on the ARGS between instructors whose primary levels of
developmental reading instruction differ. Levene’s test for equality of variance was not significant ($F_{2, 120} = .287, p < .751$). The ANOVA was significant ($F = 3.342, df = 2, p = .039$). The magnitude of the difference in performance on the ARGS according to primary level of instruction, as assessed by eta squared was small to medium ($\eta^2 = .053$).

Post hoc tests were conducted to examine pairwise differences among factor means using the Tukey procedure. The only significant difference reported was between instructors who teach primarily at the lowest levels (3 or 4 levels below) and those who primarily teach integrated reading and English or accelerated reading. Those who teach at the lowest levels scored significantly higher than instructors who teach accelerated or integrated courses, a difference of 2.7 points ($p = .033$). This finding was surprising and counter to the hypothesis that instructors whose primary level of instruction targets students in integrated reading and English courses or accelerated reading would perform significantly better than those who teach at the lowest levels.

**Teaching status.**

The survey asked participants to identify their teaching status. As expected, part-time instructors ($N = 121$) outnumbered full-time instructors ($N = 112$), although the imbalance was not extreme. The number used in the subsequent independent samples $t$-test was limited to those participants for whom total data were present for the scales that comprise the ARGS. The final sample included 124 participants: 61 full-time and 63 part-time instructors. The mean score for full-time instructors was 18.13 (SD = 3.71). The mean score for part-time instructors was 17.62 (SD = 3.35). Levene’s test for homogeneity of variance was not significant ($p = .800$), indicating that homogeneity of
A variance could be assumed. The results of the $t$-test indicated no significant difference between groups ($p= .429$), a result that was counter to the hypothesis.

**Category II Results**

The following hypotheses were tested in this category:

1. It is projected that those instructors who participate in five or more professional development activities sponsored by their departments will score significantly higher on the ARGS than will those who participate fewer than five times in the same period.

2. It is projected that instructors who perceive that their participation in professional development is germane to their teaching will perform significantly better on the ARGS than instructors who do not assign the same value to their participation.

**Department-sponsored professional development.**

As one purpose of the study was to determine the importance of participation in professional development (PD) within the past 12 months to performance on the $ARIK$-A, several survey questions were designed to quantify the PD experiences of instructors. Questions 9 and 11 were specifically directed to the number of times instructors had participated in available professional development opportunities, both at their colleges and elsewhere (online, university extension, outside conferences). Questions 10 and 12 sought to determine the primary source of those professional development activities (e.g., department chair, outside facilitators, administrators, student affairs professionals, etc.). Department-sponsored activities included department meetings, workshops, visits to colleagues’classrooms, retreats, and presentations. College-sponsored activities included
flex activities, convocation, and tenure review. Respondents could select from among four answer choices: (a) never; (b) 1-2 times; (c) 3-4 times; and (d) 5 or more times.

Professional development opportunities sponsored by the department were highlighted for the purpose of analysis, as these activities are most likely to focus on curriculum and instruction related to developmental reading. An ANOVA was conducted to determine the presence of significant differences in performance on the ARGS among instructors who had participated in various numbers of department-sponsored activities. The independent variable had three levels: 0-2, 3-4, and more than 5. The results of Levene’s test were not significant (p=.988). According to the ANOVA, there were no statistically significant differences on ARGS between the three groups as defined by frequency of PD participation (f = .151, df = 2, p = .860).

**Germane professional development.**

Five questions in the survey were designed to tease out the number of professional development opportunities that applied directly to the instruction of developmental reading. There were 194 responses to question 13: What professional development foci available at your institution are most valuable for your growth as a developmental reading instructor? Respondents could select more than one option. Those options (Table 4) included: (a) Curriculum and instruction (N=148; 76%); (b) Student learning outcomes (N=88; 45%); (c) Student completion (N=54; 28%); (d) Faculty health or personal matters, e.g., retirement (N=22; 11%); (e) Adult learning/andragogy (N=56; 29%); (f) English language learning (N=43; 22%); and (g) Other (N=25; 13%)
Table 4

*Professional Development Most Relevant to Instructor Growth (Q13)*

<table>
<thead>
<tr>
<th></th>
<th>n</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Curriculum andInstruction</td>
<td>148</td>
<td>76</td>
</tr>
<tr>
<td>Student Learning Outcomes</td>
<td>88</td>
<td>45</td>
</tr>
<tr>
<td>Adult Learning/Androgogy</td>
<td>56</td>
<td>29</td>
</tr>
<tr>
<td>Student Completion</td>
<td>54</td>
<td>28</td>
</tr>
<tr>
<td>English Language Learning</td>
<td>43</td>
<td>22</td>
</tr>
<tr>
<td>Faculty Health or Personal Matters (e.g., retirement)</td>
<td>22</td>
<td>11</td>
</tr>
<tr>
<td>Other</td>
<td>25</td>
<td>13</td>
</tr>
</tbody>
</table>

*Note.* Respondents had the option to select more than one answer choice.

Question 14 asked respondents to rate the degree to which their participation in available professional development activities promotes their personal growth as a classroom instructor of developmental reading. One hundred ninety-three responses were distributed among three answer choices (Table 5): (a) I have grown a great deal as a result of my college’s PD (N=60; 31%); (b) Professional development contributes somewhat to my growth (N=117, 61%); and (c) Professional development at my institution is basically a waste of time and resources. (N=16; 8%).

An open-ended question (Q15) asked participants to respond to the question, “How would you improve professional development at your institution?” The ensuing text responses expressed desires for diversity and multiethnic training, focus on critical thinking and equity in the classroom, instruction for students with disabilities, technology, noncognitive factors, and English language learning. Some noted that PD at
Table 5

Degree that Professional Development Promotes Growth as Classroom Instructor (Q14)

<table>
<thead>
<tr>
<th>Perception</th>
<th>n</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>I have grown a great deal.</td>
<td>60</td>
<td>31</td>
</tr>
<tr>
<td>I have grown somewhat.</td>
<td>117</td>
<td>61</td>
</tr>
<tr>
<td>PD is basically a waste of time/resources</td>
<td>16</td>
<td>8</td>
</tr>
</tbody>
</table>

their institutions does not focus on reading instruction or relate to the needs of instructors who teach basic skills. Several respondents listed “stipends.”

Participation within the past year in conferences and workshops outside the college with relevance to developmental reading was relatively common (Q16) (Table 6). These activities included conferences and workshops sponsored by the National Association of Developmental Educators (NADE), the related state association (CalNade), the International Literacy Association (ILA), the International Dyslexia Association (IDA), or a local reading association. Ninety-five instructors (48%) reported having attended one or two outside conferences or workshops; seventy-four (37%) reported never having participated; 18 (9%) reported having attended three or four outside conferences, and 11 (6%) instructors reported having attended five or more. The total number of respondents to this question was 198.

Question 17 queried respondents about participation in online or distance workshops relevant to developmental reading (Table 7). Instructors throughout the state are able to access these activities through Outreach and Technical Assistance Network (OTAN), California Adult Literacy Professional Development Project (CALPRO), and many university extension programs. One hundred thirty-five (69%) reported “never” to
Table 6

*Participation in Outside Conferences and Workshops in Past 12 Months (Q16)*

<table>
<thead>
<tr>
<th></th>
<th>n</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>One or Two</td>
<td>95</td>
<td>48</td>
</tr>
<tr>
<td>Three or Four</td>
<td>18</td>
<td>9</td>
</tr>
<tr>
<td>Five or More</td>
<td>11</td>
<td>6</td>
</tr>
<tr>
<td>None</td>
<td>74</td>
<td>37</td>
</tr>
</tbody>
</table>

*Note.* Outside conferences includes participation in NADE/CALNADE; International Literacy Association, International Dyslexia Association, or local reading association. *Total Responses = 198.*

Table 7

*Participation in Relevant Distance or Online Workshops in Past 12 Months (Q17)*

<table>
<thead>
<tr>
<th></th>
<th>n</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>One or Two</td>
<td>50</td>
<td>26</td>
</tr>
<tr>
<td>Three or Four</td>
<td>7</td>
<td>4</td>
</tr>
<tr>
<td>Five or More</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>None</td>
<td>135</td>
<td>69</td>
</tr>
</tbody>
</table>

*Note.* Available through Outreach and Technical Assistance Network (OTAN), California Adult Literacy Professional Development Project, and university extension programs. *196 total responses*

This question; fifty (26%) had participated in one or two distance workshops; seven participants (4%) reported having participated in three or four such activities; four (2%) reported having participated in five or more. The total number of respondents to this question was 196.

Question 25 asked respondents the extent of their agreement or disagreement with the statement, “My department/college/district provides useful professional development...”
that is germane to my teaching.” Though respondents had five choices ranging from “strongly disagree” to “strongly agree” and “don’t know” on the original survey, this item was later collapsed into a dichotomous category for purpose of analysis. Once the category was collapsed, 41 respondents disagreed and 148 agreed that their participation in PD was germane to their teaching. The four “don’t knows” were excluded from the analysis. An independent samples t-test was then conducted to determine the existence of significant differences in performance on the ARGS between instructors who participate in PD they consider germane to their teaching of developmental reading and those who do not assign that value to their PD participation. For the purpose of this analysis, the sample was limited to those instructors whose results for the composite ARGS were available. Thus, the final sample included 120 participants, 90 of whom agreed that their participation in available PD was germane to their instruction of developmental reading and 30 of whom disagreed. The mean score for those who disagreed was 19.2 (SD = 2.86) while the mean score for those who agreed was 17.5 (SD = 3.68). The independent samples t-test indicated a significant difference between groups (t = 2.89, df =118, p = .024). This difference represented a large effect size (Cohen’s d=.515), a result that ran counter to the hypothesis that instructors who felt their participation in PD that is germane to their teaching would perform significantly better.

Category III Results

This section will describe the derivation of the variable SENSE OF COLLEGIALITY from three related survey questions and present the results of two conceptually-related independent samples t-tests. These analyses were conducted in order
to explore the conceptual framework of this study, a framework that employs both expectancy-value theory (Vroom, 1964) and collective efficacy (Bandura, 1997).

**Sense of collegiality.**

Three questions assessed instructors’ sense of collegiality at their colleges. Question 21 asked instructors to rank level of agreement or disagreement with the statement “I feel personally included in the professional learning community of my department.” Question 24 asked for agreement or disagreement with the statement, “Tenured faculty are supportive of part-time faculty,” and question 25 asked instructors to rank agreement or disagreement with the statement “My college promotes collegiality and support among all faculty, including adjuncts.” The three responses were totaled and recoded into a new variable named “SENSE OF COLLEGIALITY.” The variable was then employed in an independent samples t-test in which SENSE OF COLLEGIALITY was the dependent variable and teaching status (part- or full-time) was the independent variable. In this case, the full version of the dataset was employed. The dependent variable ranged on a scale from 3 to 12. There were 200 participants in the sample, 101 part-time and 99 full-time instructors. The mean score for part-time instructors was 8.79 (SD = 2.12), while the mean score for full-time instructors was 9.84 (SD = 1.85). Data were analyzed using an independent samples t-test. The results indicated that there was a significant difference between groups (t = 3.718, df = 198, p < .001). This difference represented a large effect size (Cohen’s $d = .528$).

**Professional learning community.**

A related analysis sought to determine the existence of a significant difference between the proportion of full-time and part-time instructors who agree or disagree with
the notion that they are members of a professional learning community within their
department. This analysis relied on the following question, one of the three questions
(Q21) that had been conflated into the variable SENSE OF COLLEGIALITY from the
previous analysis: “I feel personally included in the professional learning community of
my department.”

As with many of the other questions that ranked agreement or disagreement on a
continuum, responses were collapsed for the purpose of analysis into a dichotomous
category: agree or disagree. The sample consisted of 209 participants. A chi-square
analysis yielded 29 part-time instructors (27.1%) who disagreed and 78 (72.9%) who
agreed with the statement that they feel part of a professional learning community at their
institutions. Full-time faculty was similarly inclined. Of 102 full-time faculty members,
18 (17.6%) disagreed with the statement and 84 (82.4%) agreed. The results of the chi-
square analysis were not significant ($\chi^2 = 2.679, df = 1, p = .102$); therefore the null
hypothesis was retained; it can be assumed from this analysis that the proportion of
faculty that report that they are members of a professional learning community is not
dependent on teaching status.

A detailed discussion of these results as well as a discussion of the implications
and recommendations will be included in Chapter 5.
CHAPTER 5—DISCUSSION

This study was in essence archaeological. As traditional archaeology seeks to understand a human culture by examining its artifacts and placing them within a historical and geographical context, this study was a foray into the culture of developmental reading instructors. The tools of archaeology—survey, excavation, and analysis—were employed to begin to investigate who these instructors are and whether they have the appropriate educational background and support from their institutions to accomplish their challenging task—that of raising the reading proficiency of students who enter college relegated to remedial courses—behind before they begin. The students in their classrooms may not be skilled readers, but they are savvy enough to know they are deficient in an important way, which creates unique challenges for their instructors. A survey was employed to collect information about the educational backgrounds, ages, and ethnicities of these instructors and whether they teach at one campus or many. The study reached out to 1795 reading instructors at the 112 community colleges in the state—colleges from rural areas as well as those located in large metropolitan areas, single campus and multiple campus districts. The names were gathered through a painstaking process of hand-searching individual college catalogs and Spring 2015 class schedules to identify reading instructors. Many of the email addresses belonging to part-time instructors were unavailable; they were inferred by examining the email addresses of department heads and other permanent personnel and attempting to discern patterns. Some colleges use first-initial-plus-last-name. Others use last name-plus-first-name; some limit addresses to the first eight letters of first and last name, and some begin with the last name, then add as many letters of the first name as will fit a given number. There
were many variations; it was an imperfect process at best. The survey also helped shed light on the teaching histories of these instructors—how long they have been teaching, whether they teach full-time or part-time, and whether their teaching background now includes or has in the past included experience teaching younger students.

The survey also assessed the instructional knowledge of developmental reading instructors. This phase entailed administration of the *Assessment of Reading Instructional Knowledge-Adults (ARIK-A)*, a standardized, validated instrument developed by Bell and colleagues (2013) to assess knowledge of reading instruction aimed at adults with low literacy. The *ARIK-A* was developed specifically to target instructional knowledge in the five areas identified by the Adult Literacy Research Working Group (ALRWG) in collaboration with the National Center for the Study of Adult Learning (NCSALL): assessment, alphabetics, fluency, vocabulary, and comprehension.

Survey questions collected evidence to help understand the role of professional development (PD) in the professional lives of instructors. Questions probed the nature of that PD, who delivered it, the frequency of individual instructors’ participation, and whether they perceived that the PD offerings in which they do partake are directly relevant to their teaching. In an attempt to dig into the culture of developmental reading instructors, the survey posed questions to discern instructors’ perceptions of a sense of collegiality on campus and whether they experienced a sense of belonging to a professional learning community within their departments.

Once the collection of demographic information and assessment data from the *ARIK-A* was complete, the analysis phase of the study was initiated. Quantitative methods including ANOVA, independent sample *t*-tests and a chi-square analysis were employed
to analyze the data. Some significant differences in performance on the *ARIK*-A were illuminated between instructors according to specific factors: educational background; experience teaching in the K-12 sector; primary level of instruction; and perceptions of professional development activities. A significant difference in sense of collegiality according to teaching status was revealed.

There were also instances in which significant differences did not emerge: employment status was not a factor in performance on the *ARIK*-A, nor did employment status play a role in the proportion of instructors who claimed a sense of belonging to a professional learning community in the department.

The following chapter will include a detailed discussion of each analysis and hypothesis comprising the categories that formed the organizational structure of the previous chapter. A discussion of the study and instrument limitations will follow. This will also include a discussion of the possible limitations of two constructs used in the survey: “germane” and “professional learning community.” The final portions of the chapter will focus on the implications of the results of the study and recommendations for both classroom practice and institutional policy. Like any in-depth investigation of a complex culture that is both firmly entrenched and transient, this study raises new questions and suggests many possible avenues for future research. That discussion will conclude the chapter.

The eight research questions were organized into three categories. Category I included questions that examined the role of specific demographic factors in the existence of significant differences in performance on the *ARIK*-A. The second category explored whether professional development might be a factor in significant differences in
performance on the ARIK-A. The final category did not depend on performance on the ARIK-A. The two questions in this category relied on subjective constructs as outcome variables: sense of collegiality and sense of belonging to a professional learning community. Both analyses then employed “teaching status” as the independent variable.

**Category I Analyses**

Every profession includes an unspoken pecking order, whereby some positions are accorded more status than others. The overarching rule in education is that those who teach at four-year institutions (professors) occupy the top rung in the education world; those who teach in the primary grades (teachers) hover near the bottom, just a step above pre-school (Miss Anna). Each sector then has its own status determinants. At community colleges with their broad missions, the highest status is accorded those instructors whose students will earn associate’s degrees and transfer—generally those in the sciences, social sciences, and humanities. Instructors who teach technical-vocational fields are generally accorded less. This may partly be a function of the educational credentials required to teach those fields. While a MA in the field is a minimum qualification to teach in an academic discipline such as science or history, some career-tech fields require an associate’s degree and work experience (Russell, 2012), qualifications traditionally considered less prestigious, particularly in a college setting. Reading is unique. It is not considered a distinct academic discipline. Instructors do not graduate with a MA in reading, as they might from English or history.

**Specific Reading Background**

The credentials held by community college reading instructors reflect this lack of discipline distinction. Since reading is not a distinct discipline, the community college
chancellor’s office mandates that reading instructors may hold a MA in one of many fields to meet the minimum qualifications, including education, literature, linguistics, applied linguistics, comparative literature, psychology, or teaching of English as a second language. If the MA is in education, candidates for positions in reading must have specialized in reading or teaching reading. If the MA is in one of the other disciplines, teaching candidates must have completed 12 semester units of coursework in teaching reading. They may also apply for equivalency, in which case the human resource department at the individual college determines their qualification for hire. San Diego State University (SDSU) offers one example. Education students at SDSU may earn a MA in reading education, but that MA does not include elements of instruction in the theories or course design of teaching low-level adult readers. Many adult students are not native speakers of English and many others struggle with learning disabilities; both populations are widely represented in developmental reading classrooms (Kozeracki, 2005).

Kozeracki (2005) also addresses the mismatch between the knowledge graduate students may gain from their MA or reading specialization programs and what they need to teach developmental reading (Kozeracki, 2005). She offers a useful context. Many instructors do not embark on careers with the intention of teaching developmental reading. They may have been drawn to college majors in comparative literature, linguistics, or psychology. Unless they pursue a PhD in their field, however, the likelihood of earning a living with those disciplinary backgrounds is slim. Thus, many opt for 12-unit certificates in reading, which take a year or less to earn and allow them to compete for teaching jobs at a community college. A close look at the course descriptions
for both the specialization in reading and the MA in reading education at SDSU confirms Kozeracki’s (2005) contention that a mismatch exists between what developmental reading instructors know and what they need to know (Kozeracki, 2005). Much of the coursework explicitly targets the teaching of reading to children. TE 530, “Literature for Children and Adolescents,” is required. Another course (TE 635) focuses on assessment of reading and language arts, important to understand but rarely conducted in the developmental reading classroom setting. TE 677, “Research Pedagogy for Diverse Learners,” might include instruction for low-level adult readers or those with learning disabilities, but neither is explicitly included in the course catalog (San Diego State University Graduate Bulletin, 2015-2016).

This could be changing. Some California state universities offer certificates specific to teaching postsecondary reading. The Certificate in Postsecondary Reading offered by San Francisco State University (SFSU) includes four three-unit courses that specifically address the needs of adult learners. One course (710) entitled Course Design in Post-Secondary Reading and Composition provides guidance in designing and implementing effective courses, given the realities faced at most community colleges, including large classes, and diverse needs. Another (701) “Theoretical Backgrounds in College Reading Instruction,” examines the role of prior knowledge and schema and general linguistic processes relevant to adults. The California state universities at Fullerton (CSUF) and Los Angeles (CSULA) offer similar programs (CSUF, n.d.; CSULA, n.d.).

Given the general lack of specific graduate education in teaching reading to low-level adult readers, the results of the ANOVA that analyzed differences in performance
on the ARIK-A between instructors with different educational backgrounds were not surprising. Students who earn a MA in education, as opposed to other disciplines have more exposure to the explicit terminology and concepts targeted on the ARIK-A. Although instructors with a MA in education and a specialization in reading performed significantly better statistically than did instructors with MAs in other fields with or without specific instruction in teaching reading, it is worthwhile to examine those results more closely. The total possible score for the combined Vocabulary and Comprehension scales was 28. The mean score for instructors with an MA in education and a specialization in teaching reading was 19.1. The mean score for instructors with an MA or doctorate in another field and 12 units of specific instruction in teaching reading was 17.13, lower by 1.90 points ((p = .019). It is interesting to note that the mean score for instructors with an MA or doctorate in another field and no specific instruction in teaching reading was slightly higher than the second group (17.21) but still fewer than two points (1.98) lower than mean score for instructors with an MA in education and a specialization in teaching reading (p = .035).

The frequencies (illustrated in Table 8) of right and wrong answers are telling. Question 50, “When asking an adult learner to read a short text selection, integrate the ideas, and make generalizations from information, you are assessing their ability to…” generated 73 correct (58.9%) and 51(41.1%) incorrect responses. The correct response, “Summarize,” is a reading strategy that is fundamental to reading instruction geared toward students who will encounter extensive reading in their college-level coursework. Hock and Mellard (2005) point to summarization as one of the most important
comprehension strategies for adult literacy outcomes. The three incorrect responses to that question were “Review,” “Recall facts,” and “Paraphrase.”

Table 8

*Frequency of Correct and Incorrect Responses*

<table>
<thead>
<tr>
<th>Item</th>
<th>Correct</th>
<th>Incorrect</th>
<th>%</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Which of the following tends to be the easiest comprehension skill to master for adult learners?</td>
<td>90</td>
<td>34</td>
<td>72.6</td>
<td>27.4</td>
</tr>
<tr>
<td>locating a single piece of information*</td>
<td>51</td>
<td>73</td>
<td>41.1</td>
<td>58.9</td>
</tr>
<tr>
<td>When asking an adult learner to read a short text selection, integrate the ideas and make generalizations from information, you are assessing their ability to do which of the following?</td>
<td>65</td>
<td>59</td>
<td>52.4</td>
<td>47.6</td>
</tr>
<tr>
<td><strong>summarize</strong>*</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The least effective teaching strategy for you to use to improve reading comprehension of adult learners is ___</td>
<td>84</td>
<td>40</td>
<td>67.7</td>
<td>32.3</td>
</tr>
<tr>
<td><strong>independent reading of difficult text</strong>*</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The technique you should choose to most effectively promote adult learners’ active engagement in reading and understanding materials appropriate for the workplace is ___</td>
<td>76</td>
<td>48</td>
<td>61.3</td>
<td>38.7</td>
</tr>
<tr>
<td><strong>question generation</strong>*</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>To improve vocabulary of adult learners, you use words that ___</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>are functional</strong>*</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Note.* * indicates correct response

Question 53, “The technique you should choose to most effectively promote adult learners’ active engagement in reading and understanding materials appropriate to the workplace is…” generated 84 correct (67.7%) and 40 (32.3%) incorrect responses. The
correct response, “question generation,” is also a basic reading strategy that promotes comprehension as students move toward independence.

**Experience in the K-12 Sector**

The hypothesis that instructors with either past or current experience teaching reading or English in the K-12 sector would significantly outperform instructors without that experience was engendered by the same underlying assumption that promoted the first hypothesis. Elementary and secondary teachers in California hold credentials that ensure backgrounds in education and periods of supervised classroom teaching. Student teachers are required to prepare lessons that include objectives, direct instruction, guided practice, collaboration, independent practice, and plans for formal or informal assessment. This exercise, repeated many times over the course of the student teaching experience, builds expertise in constructing effective learning experiences for students who are diverse—in language, learning styles, and background knowledge—to motivate them, and to scaffold the learning in such a way that the supports can be gradually removed. Pearson and Gallagher (1983) refer to this teaching framework as the gradual release of responsibility in which a teacher moves from the “sage on the stage” to “guide on the side” (Designer Librarian, 2013). In teacher parlance, this is often referred to as a sequence that moves from “I do it” (focus lesson),” to “We do it” (guided instruction), to “You do it” (collaboration), to “You do it alone” (independent) (Fisher, 2008).

In contrast, the majority of community college developmental reading instructors have not received supervised training in strategic reading instruction to adults. According to the results of the ARIK-A, instructors with background in K-12 performed significantly better than instructors without that background, yet the results still reflect a gap in
knowledge about what are generally accepted as best practices in adult education. A question on the ARIK-A addresses familiarity with the concept of direct instruction: “Teacher B presents vocabulary words by reading orally a short passage, then asks the students to read the passage, substituting words with similar meanings and provides feedback. This teacher is providing which method of instruction?” (ARIK-A). Seventy-three (58.9%) of the respondents selected the correct answer choice, “Direct instruction.” Fifty-one (41.1%) selected one of the three incorrect answer choices: “informal instruction,” “implicit instruction,” or “indirect instruction.” The independent samples t-test indicated a significant difference in performance (p = .049) for teachers with K-12 experience, which supports the benefits of specific background in education for instructors and their students. While the statistics demonstrate that instructors with backgrounds in K-12 outperformed their peers without that background, the frequencies of incorrect responses to many of the questions that comprised the ARGS still point to an overall lack of pedagogical content knowledge in vocabulary and comprehension instruction.

The issue of teacher preparation is an important one. Kruidenier (2002) cites two studies that point to its benefits. An exploratory path analysis of adult basic education program data from 20 states found that the degree of teaching experience is positively associated with reading comprehension, and a national study in Britain of basic skills programs found that in those programs in which teachers are qualified with certification or BAs in education, students made significantly greater gains in reading comprehension (Kruidenier, 2002; McShane, 2005).
Kruidenier and colleagues (2010) caution that despite heavy emphasis on modeling and teaching students to self-monitor their text comprehension, even very good teachers may omit crucial aspects of strategy instruction. Even so, the evidence underscores the importance—and the difficulty—of teaching students to become strategic readers. Kruidenier (2002) further points out that teachers can learn to teach reading comprehension to students, and when the teachers have the benefit of this teaching knowledge, their students’ reading improves. The following question on the ARIK-A addressed this issue: “Which of the following tends to be the easiest comprehension skill to master for adult learners?” Ninety (72.6%) participants selected the correct answer choice, “locating a single piece of information.” Thirty-four (27.4%) selected one of the three incorrect choices: “making predictions,” “identifying the main idea,” or “drawing inferences.” It is surprising that even one reading instructor believes that teaching students to draw an inference is easy. In order to draw an inference, students must synthesize prior knowledge and language expertise, elements that contribute to reading comprehension and that are commonly weak for students in developmental classrooms. Research confirms the difficulty of teaching students to draw inferences when most of their past reading experience has required them solely to locate a single detail or fact to answer questions, such as “who,” “what,” “when,” and “where.” In order to draw an inference, a reader must connect ideas and understand relationships not explicitly stated in the text. Commonly referred to as “reading between the lines,” a reader must make an educated guess based on knowledge of the language or knowledge in general. At the sentence level, that might seem simple to a native speaker of English. The following example illustrates how this might be difficult for many students, especially those who
have not mastered English: “Alex bought a bunch of DVDs at the flea market. He then put the entire stack in his backpack.” The reader must infer that “the stack” refers to the “bunch of DVDs.” That is not obvious to English language learners who might not be familiar with words such as “stack” and “bunch” or recognize that both words refer to the same thing.

The challenge of teaching students to draw an inference is even more complex when students are dealing with college reading material and subject matter that is unfamiliar. Developmental reading teachers are preparing low-skilled readers to navigate textbooks and other materials that are written at a high level with the assumption that readers possess enough background knowledge to understand causal relationships and consider how parts of the text contribute to the whole (Carlisle & Rice, 2002; Frey & Fisher, 2013). Personal classroom experience confirms the challenge of teaching students to make inferences that depend heavily on prior content knowledge, which developmental reading students often lack.

**Primary Level of Instruction**

The result of the ANOVA that analyzed performance on the *ARIK-A* according to level of primary instruction was initially surprising. The operating hypothesis that instructors who teach at the highest levels would outperform those instructors whose students place at the lowest developmental reading levels proved unfounded. Upon reflection, however, the hypothesis serves to underscore the bias discussed earlier in the chapter—that status and its accompanying respect decline as the level of instruction falls. This is evident not only in the bigger picture—a university professor is generally accorded more status than an elementary school teacher—but even within sectors. Thus, a
A high school English teacher is often assumed more knowledgeable about literacy development than a second grade teacher. Kozeracki (2005) refers to the tension in the community college hiring process between the highly-respected literature degree and the less prestigious but more pertinent education or reading degree (Kozeracki, 2005). The operating hypothesis in this case was based on the assumption that those who teach at the higher levels of developmental reading would know more, and thus perform better, on an assessment of instructional knowledge. However, the results of the ANOVA refuted that hypothesis. In fact, instructors who teach at the lowest developmental levels (three and four levels below college-level) performed significantly better (p = .039). Upon further reflection, however, the results of this analysis make sense.

Nationwide, the trend is to examine closely the barriers that stand in the way of improved completion rates at community colleges. Long developmental sequences are consistently implicated in student loss of momentum (Bailey et al., 2010; Venezia & Hughes, 2014; Rutschow & Schneider, 2012). Students from underserved populations especially, including low socioeconomic status, minority groups, and second language learners, contend with many obstacles; the necessity to take classes that consume limited financial aid without accruing credits toward completion presents a barrier that is insurmountable to many students already stretched thin by financial vulnerability, responsibilities for dependents, and work commitments. CAP is a statewide effort that began at Chabot College in 2000 to rectify the dismal rates of completion for students who begin college placed into remedial English or math. Chabot is located in Alameda County in the East Bay region of California. In 2013, Chabot enrolled more than 13,000 students, three-quarters of the student population were members of racial/ethnic minority
groups. Edgecombe et al. (2014) describe the structural, curricular, and pedagogical reforms that have resulted in improved outcomes at Chabot. What began in fall 2000 as an offering of 13 sections of an accelerated English course had grown to a three to one ratio of accelerated to non-accelerated Chabot English classes by 2011. Edgecombe and colleagues (2014) describe the intentional process of redesigning the curriculum and integrating the reading and writing classrooms at Chabot. Funds from a Title III grant were used to reorganize the separate reading and writing centers into the Writing and Reading Across the Curriculum Center. Explicit instruction in sentence structure, punctuation, and other grammar topics was embedded into other assignments; faculty changed their overall approach to one that reflected more of a whole-language, or holistic approach. Students read complex, full-length texts, primarily non-fiction to more accurately reflect the expectations of college-level courses (Edgecombe et al., 2014).

By the end of 2011, CAP had reached out to 90 of the 112 community colleges in the state along with 30 colleges from other states (Hern, 2012). A research brief issued by CAP in 2015 focused on practices with strong evidence for improving student outcomes, including acceleration and integration of reading and writing courses. The state legislature passed AB 770 in 2015, which allocated $60 million to fund the Basic Skills and Student Outcomes Transformation Program (Hern, 2015). The bill specifies that basic skills classes must align content with students’ programs of vocational and academic study and contextualize foundational skills for the industry cluster or pathway in which a student hopes to advance. The trend toward acceleration and integration often, though not always, go hand-in-hand, which supported the rationale to conflate into one group those instructors whose primary level of teaching is either accelerated reading or
integrated reading and writing. These changes, and the trend toward a holistic approach, both at Chabot and other colleges that have adopted or will adopt these practices, might help explain the results of this study, which demonstrated that instructors whose primary level of instruction is three or four levels below college-level performed significantly better on the ARIK-A, an assessment that targets knowledge of specific instructional terminology. Instructors who teach accelerated or integrated courses focus more heavily on critical thinking and synthesis of text and ideas, concepts not addressed in this assessment.

Many community college instructors draw a sharp distinction between the objectives of adult basic education and community college developmental education. Once students matriculate to community college, the assumption, not always borne out, is that students have long ago “learned to read,” construed as their having outgrown the need for basic reading skill instruction. The emphasis once students enter college is primarily on “reading to learn,” with its primary focus on higher-level skill attainment: retrieving and organizing information from text, synthesis of ideas from multiple sources, annotation, summarization, vocabulary development, and other text-based activities. Classes tend to be large (more than 30), and their structure does not enable instructors to work individually with students who might require intense focus on the reading basics.

The ARIK-A, on the other hand, focuses on instruction in the five areas of reading identified as potential sources of difficulty for adults by the National Reading Panel (2000). Two of those areas were the primary focus of this study: comprehension and vocabulary instruction. The result of this analysis highlighted the unique value of the ARIK-A and also underscored some limitation of its utility for community college. It is an
instrument designed to assess the knowledge held by instructors who work mostly in settings that serve the lowest-level adult readers, not those who face large classes filled with diverse learners and one semester to align courses and assignments to subsequent college-level courses. Many respondents sent emails voicing objection to the content of the assessment. The following emails were typical:

I finished survey. We teach textbook reading in our department, not beginning adult reading, so I hope it helped since the terminology is much different. We teach reading, writing, and math 2, 3, & 4 levels prior to transfer (Participant, personal communication, October 8, 2015).

I appreciate your efforts to improve developmental reading instruction through your research, but do you realize that you are asking full-time tenure-track reading instructors to take a “test” created and evaluated by you, on whether or not we are competent enough to do our jobs? If you had the goal of determining “how” I do my job, rather than the very subjective “instructor knowledge of teaching developmental reading” I would have assisted you in your efforts. (Participant, personal communication, October 5, 2015)

The instrument highlights issues that fueled the “reading wars” controversy of the late 20th century, with one side emphasizing the superiority of explicit phonics instruction and the other insisting that a literature-based approach was best (Holschuh & Paulson, 2013). This issue will be addressed further in the implications section of this chapter.

Teaching Status

The preponderance of instructors who teach developmental courses are employed part-time (Grubb, 1999; Grubb & Gabriner, 2013; Jacoby, 2006; Jaeger, 2008; Jaeger &
Eagan, 2009; Kezar, 2013; Sabatini, Ginsburg, & Russell, 2002). For some, this is a choice. They teach one or two classes to supplement their incomes. Others, known by the moniker “freeway flyers” travel between multiple colleges to patch together the equivalent of a full-time income (Grubb & Gabriner, 2013). Eagan and Jaeger (2008) contend that a system that is mostly dependent on part-time faculty is operating at a diminished capacity (Eagan & Jaeger, 2008). Cohen and Brawer (2008) note the changing ratio of part-time to full-time instructors over the various stages of community college development and the overall tendency to depend on the lower-cost source of labor to balance the budget. They contend that as long as the law and collective bargaining agreements do not stop the practice, administrators will continue to employ lower-paid, part-time instructors. In fact, they claim, “Part-time instructors are to the community colleges what migrant workers are to the farms” (Cohen & Brawer, 2008, p. 95).

Many part-time instructors report feeling marginalized. Typically, individual office space to work or meet with students is not available; part-time salaries are calculated for face-to-face class time only, which lessens motivation to attend staff meetings or participate in department-led initiatives. In fall 2015, for the first time, part-time instructors at one community college in San Diego County were required and paid non-teaching hours (calculated at a lower rate than teaching hours) to attend opening convocation. If they were unable to attend, they were required to arrange with the department chair to make up the time in another way. They were also paid for office hours for the first time in 2015. However, if their own students did not show up for those office hours, part-time instructors were required to sit in the Academic Success Center and make themselves available to any student in need of academic assistance.
When the department chair arranges the teaching schedules, part-time faculty choose among the courses remaining once the full-time faculty have made their selections. This often results in awkward schedules with large gaps between classes, early morning classes, the necessity to drive from one site or center to another, and multiple course levels in a semester, which entails more preparation. The hypothesis that full-time instructors would perform significantly better on the ARIK-A was based more on personal knowledge of the issues faced by part-time faculty than any sense that full-time instructors possess more knowledge. The hypothesis also drew on the study’s conceptual framework. Instructors who operate at the margins of the department necessarily lack expectancy, or a sense of control over their professional lives (Vroom, 1964).

The hypothesis that full-time faculty would perform significantly better on the ARIK-A also touched on issues of collective efficacy, another element in the conceptual framework that structured this study. Bandura identifies the benefits of vicarious experiences as a key element in collective efficacy. CAP, mentioned earlier, is a prime example. College participation in this initiative entails collaborative discussions among colleagues and departments and the promotion of a culture of shared problem-solving (Bandura, 1997; Hodara & Jaggars, 2014; Tschannan-Moran & Barr, 2004). Since part-time faculty generally participates less than full-time faculty in this culture, the assumption was that their performance on an assessment that required at least 45 minutes of unpaid time might suffer.

The results did not bear this out. The independent samples t-test indicated no significant differences between groups on this measure. This result confirms a study conducted by Bell, et al. (2004) in which an earlier version of the ARIK-A was
administered to full-time, part-time, and volunteer teachers who taught literacy to adults in community colleges, correctional facilities local school systems, and community based programs. The participants were also surveyed to determine how they assessed their own preparation to provide reading instruction. Approximately 50% of the volunteers, 40% of the full-time, and 33% of the part-time educators considered themselves well-prepared. Yet, the three groups had a similar number of correct responses on the ARIK-A: full-time teachers answered 62% of the items correctly; part-time teachers answered 61% of the items correctly, and the volunteers answered 62% of the items correctly (Ziegler, McCallum, & Bell, 2007). Thus, this current study, though not identical, suggests a similar pattern. Neither study indicates a difference in knowledge base between part- and full-time instructors. In addition, neither study addresses issues of equity and parity that undermine collective efficacy, which affects the overall sense of the group that together it can prevail over the many challenges involved in teaching students who enter college consigned to developmental education.

Category II Analyses

Professional development—its role and its execution—is widely studied and discussed in the community college arena. Kezar (2013) emphasizes the role of institutional policy and practice in re-shaping the role played by professional development. Rutschow and Schneider (2012) acknowledge the preponderance of part-time faculty and the overall limited training in instructing basic skills students whether or not they teach part- or full-time. They contend that effective instruction is among the most important factors in the academic performance of developmental students and
recommend robust efforts to develop more integrated approaches to professional development (Rutschow & Schneider, 2012).

**Department-Sponsored Professional Development**

Very few developmental reading instructors have strong educational backgrounds in teaching reading to adults. This knowledge resulted in the hypothesis that instructors who participate in five or more department-sponsored professional development activities would perform significantly better on the ARIK-A than would instructors who participated in fewer activities. While the survey that was disseminated to participants included questions about participation in professional development sponsored by the department, college, outside workshops and conferences, or conducted online, this analysis focused solely on professional development sponsored by a participant’s own department. This decision was predicated on the knowledge that department-sponsored professional development is available to everyone (unlike outside conferences or online workshops) and tends to focus directly on matters of curriculum and instruction. The full data set, before participants were eliminated for missing data on the ARIK-A, confirmed this. To the question, “What professional development foci available at your institution are most valuable to your personal growth as a developmental reading instructor?” 148 (76%) checked “curriculum and instruction.” Eighty-eight respondents (45%) checked “student learning outcomes”; adult learning was noted by 56 (29%) of the 194 total responses.

A related question asked respondents to rate the degree to which their participation in available professional development opportunities promotes their personal growth as a classroom instructor of developmental reading. Sixty respondents (31%)
claimed to have grown a great deal as a result of their participation; one hundred seventeen respondents (61%) reported that professional development “contributes somewhat” to their growth; sixteen respondents (8%) noted that professional development participation was basically “a waste of time and resources.”

The data from the survey appeared to indicate that instructors most valued PD dedicated to curriculum and development, and that PD participation plays an important role in promoting growth as a classroom instructor. Yet the subsequent ANOVA conducted on the sample that included all valid data (n =124) did not support the hypothesis that instructors who participated in five or more PD activities within the last 12 months would perform significantly better on the ARIK-A. The independent variable included three levels: 0-2 activities; 3-4 activities; and more than 5 activities. The results of the ANOVA indicated no significant differences between the groups defined by the number of PD activities within the past year.

The most likely explanation for this result is a mismatch between this particular assessment and the focus of PD at many community colleges. As discussed earlier, the “hot topic” in curriculum these days is not explicit instruction of comprehension strategies or vocabulary—the focus of the ARIK-A—but the integration of reading and writing in the interests of promoting student completion and success. The integration of reading and writing is not a new concept. In fact, Bartholomae and Petrosky (1986) describe a collaborative effort at the University of Pittsburgh in which they developed a basic writing course that required its students, those ordinarily assigned to a remedial-level course, to participate in a small seminar where students met to read, write, and talk about a single problem or subject over the course of the semester. The course design was
predicated on the idea that students would benefit by working in a small tightknit group with the support of professors while engaged in the type of work that typifies serious college study. The authors contend that there was no reason to prohibit students from doing serious work because they could not do it correctly. They continue, “In a sense, all courses in the curriculum ask students to do what they cannot yet do well” (Bartholomae & Petrosky, 1986, preface). However, not everyone believes the current trend toward integration of reading and writing and its concomitant effects on professional development are positive. One respondent contacted me by telephone (number provided on the consent form) and vehemently articulated her displeasure at the direction taken by her college in response to the large number of students with significant deficits in reading. She characterized the debate as one that pits “coping with text over conquering text.” In her view, the current trend that focuses on helping students to develop strategies to cope with their lack of reading skill rather than helping them to master word attack and comprehension skills and strategies is counterproductive to the goal of improving overall reading comprehension. She was vocal in her contention that CAP is leading English departments in the wrong direction (Participant, personal communication, October 10, 2015).

**Germane Professional Development**

The results of the independent samples *t*-test that analyzed significant differences in performance on the *ARIK-A* according to whether or not instructors felt that their participation in professional development was “germane” to their instruction was the most surprising result in the study. The final sample included 120 participants; 90 participants agreed that their participation in PD was germane to their instruction of
developmental reading and 30 disagreed. The result indicated a significant difference. In fact, instructors who disagreed that participation was germane performed significantly better than those who agreed, a perplexing result that ran directly counter to the hypothesis. The hypothesis was based on the proposition that instructors participate in professional development precisely because they find it valuable—or germane—to their teaching. What was not considered beforehand—or determined by the survey—was whether professional development is mandatory. As it happens, Title 5, the section of the California Education Code devoted to community colleges, outlines a Flexible Calendar Program—known as “flex days”—that removes from instruction a certain number of days in the semester to enable faculty to work in groups to address issues related to staff improvement, student improvement, and instructional improvement. Since flex days are included in a faculty member’s contract, they are mandatory. Colleges have latitude in how they schedule the days in the calendar and what types of activities they offer. In general, full-time and part-time faculty must meet their flex obligation, based on the number of assigned instructional hours (Academic Senate of the California Community Colleges, 2007).

The fact that professional development is required puts the result in a new light. Mandatory activities sometimes provoke resistance. Anecdotally, many faculty members do not relish attending professional development, unless it is directly applicable to their instructional needs. Perhaps the results of the ANOVA can be explained by the knowledge that those who believe that professional development is germane to their teaching are those who acknowledge gaps in their instructional knowledge and depend on available PD to fill those gaps. Though they may believe the professional development is
germane to their instruction, the professional development activities themselves might not target the precise areas represented on the ARIK-A assessment.

Another possible explanation for this result is intriguing. Bell, Ziegler, and McCallum, who later developed the assessment instrument employed in this study, published an article in 2004 entitled “What Adult Educators Know Compared with What They Say They Know About Providing Research-Based Reading Instruction.” At that time, Bell et al. (2004) were working with an earlier iteration of the instrument entitled, The Knowledge of Teaching Adult Reading Skills (KTARS). It consisted of three parts: demographic (KTARS-D) in which respondents supplied demographic information (e.g., job title, area of certification); Direct Assessment (KTARS-DA), which contained 40 multiple-choice items that assessed knowledge of adult reading instruction and practices; and Self-Report (KTARS-SR), which contained 40 Likert-like scale items to assess what the teachers believed they knew about instruction and practices. Each item on the SR scale was yoked to an item on the DA scale. Thus, researchers could link each correct or incorrect answer directly to whether the respondent believed he or she knew the correct answer. According to the analysis, the overall content mastery was at a level consistent with perceived overall mastery (slightly less than 50%); however, the correlation between individual items and perceived knowledge was low. Participants’ self-report of specific content rarely corresponded to their actual mastery, as determined by the yoked score. The expectation of a positive relationship between cognition (actual knowledge) and metacognition (knowledge about one’s knowledge) was not confirmed (Bell et al., 2004). It is possible that the same mismatch between cognition and metacognition was demonstrated by the results of this current study, since instructors who believe their
participation in professional development is germane to their instruction actually scored
significantly lower on the ARIK-A.

**Category III Analyses**

The questions and hypotheses in this category differed from the previous two
categories in that they did not seek the existence of significant differences in knowledge
according to various demographic factors (e.g., teaching status, educational background,
etc.). The intention here was to explore the study’s conceptual framework. That
framework is built from two theories: expectancy-value theory (Vroom, 1964) and
collective efficacy (Bandura, 1997), which together comprise the external elements of the
framework. Grubb’s (2013) Triangle of Instruction is the cross brace that provides
support within the framework (Grubb & Gabriner, 2013). That triangle—the students, the
instructors, and the content—not only support the institutional framework, they justify its
existence. It is students, instructors, and curriculum, after all, that imbue the institution
with purpose. The two research questions explored in this category are first steps toward
exploring the intersection of these elements and how they operate to promote or impede
the overall missions of the colleges.

**Sense of Collegiality**

Much scholarly research examines the issues faced by part-time faculty (Dee,
2004; Eagan & Jaeger, 2008; Gerstein, 2009; Grubb & Gabriner, 2013; Jaeger, 2008;
Jaeger & Eagan, 2009; Kezar, 2013). Part-time faculty often spend as much time facing
traffic as they do facing students, as they move between campuses and centers. They
report feeling marginalized and excluded from department initiatives; they often function
without individual office space, and their haphazard schedules present barriers to attendance at department meetings.

While individually each of these issues may not seem substantial, this study sought to determine whether employment status affected an instructor’s sense of collegiality within his or her department. Many studies address issues about policy and equity that concern the high percentages of part-time faculty at community colleges; one especially pertinent issue is the effect of significant numbers of part-time faculty on degree completion (Berry & Hoffman, 2008; Complete College America, 2012; Grubb & Gabriner, 2013; Jacoby, 2006; Jaeger & Eagan, 2009; Johnson, 2011; Rutschow & Schneider, 2012). The current study differs in that it begins to explore some of the underlying factors that contribute to faculty sense of belonging. Collegiality is one of those factors. Collegiality is a factor in “expectancy,” which Vroom describes as the degree of certainty an individual holds that choices will result in certain outcomes (Vroom, 1964). Instructors support student expectancy by designing curricula and activities that support students as they assume increasing control over their learning. Faculty also need support in order to feel control over the outcomes that are important to them: the success of their students, respect from colleagues, a degree of autonomy, a voice in decisions, even access to simple resources (Dee, 2004; Hern & Snell, 2013).

Achieving the Dream, a comprehensive non-governmental reform effort that includes over 200 community colleges issued a brief that included among its common threads the observation that both full-time and part-time developmental education faculty must have substantial professional development opportunities and feel genuinely valued and rewarded for their efforts in order to effectively implement reform (Achieving the
Dream, 2014). The source of that support is the institution, especially the department. When a department is functioning smoothly, faculty sense of well-being is communicated to students, which promotes their own expectancy. Instrumentality as described by Vroom (1964) is what mediates expectancy. Instrumentality is the combination of factors that frustrate or promote expectancy.

Students confront many obstacles as they navigate their educational pathways; the low completion rates attest to that. But, faculty face obstacles, too. Part-time faculty is especially vulnerable. Low spring enrollments inevitably reduce class sections for part-time instructors. Health benefits are dependent on credit-hours per semester at many colleges. Reduced class sections thus result in loss of health benefits. High faculty turnover is common. The database of reading instructors for this study was compiled by combing through spring 2015 college catalogs and class schedules. The survey was disseminated in early fall 2015. Hundreds of email invitations were undeliverable—many because the addressee was no longer employed at the institution. Dee (2004) contends that the colleges must enact strategies to reduce high faculty turnover, since high faculty turnover impacts college effectiveness overall (Dee, 2004).

Collegiality also plays a role in collective efficacy, the second link in the conceptual framework in this structure. Bandura (1997) described collective efficacy as a group’s shared belief that it is capable of organizing and executing the actions necessary to reach a goal (Bandura, 1997). Goddard et al. (2000) placed Bandura’s ideas in the context of school. The idea advanced by Bandura (1997) and elaborated upon further by Goddard and colleagues (2000) is that collective teacher efficacy is the perception on the
part of teachers in a school (or department, in this case) that, as a whole, they can have a positive effect on students (Bandura, 1997; Goddard et al., 2000).

The specific focus on collegiality in this study was a deliberate attempt to determine whether employment status plays a role in overall sense of collegiality. Collegiality is a composite of many factors—whether an individual feels like an insider in a particular group, general sense of well-being, and acceptance by peers. Collegiality is a subjective term but it contributes in an important way to both expectancy-value theory and collective efficacy, which provides the rationale for its use in this study. The possible limitations of the construct will be discussed in a subsequent section of the chapter.

The results of the independent $t$-test were not surprising. The difference between groups was significant with full-time faculty reporting significantly more of a sense of collegiality than part-time faculty. The difference represented a large effect size (Cohen’s $d = .528$). This analysis suggests that as colleges initiate structural, curricular and pedagogical reforms in the effort to improve outcomes and increase the numbers of part-time faculty in the effort to reduce expenses, attention should also be paid to the well-being of a mainstay of the Triangle of Instruction: the instructors (Edgecombe et al., 2013; Grubb & Gabriner, 2013). This will serve to strengthen the stability of the institution overall.

**Professional Learning Community**

The final analysis of this study also focused on a factor that contributes to the conceptual framework—individual instructors’ sense of belonging to a professional learning community within their departments. This question was motivated by the same questions that underlay the previous analysis. Instructors of developmental-level classes
are challenged in ways that instructors in other disciplines on a college campus are not.

First, they must overcome student disappointment, resistance, and even anger. No student arrives at the college door enthusiastic about an assignment to a remedial course. All of the students in these classrooms have failed at some point—the failure may be blamed on poor quality of their prior education, their own lack of effort, mental health issues, family problems, or learning disabilities (Cox, 2009). As Grubb and Gabriner (2013) point out, most of the students in developmental classrooms belong to low-income, underserved minority groups or they are immigrants with limited experience in academic language. Kozeracki (2005) concurs. In a study that entailed interviews with 36 developmental English teachers at seven community colleges, she reported that the sense that “they are willing to work harder on their students’ behalf than the students are willing to work themselves” was both frustrating and demoralizing (p. 42). Blank stares often meet attempts by instructors to implement novel learning activities. It is disheartening for an instructor to forego the textbook, spend hours designing interesting lessons, search for relevant reading materials appropriate to both the adult status and low-reading levels of students, create recording sheets that ask for more than a single-letter answer, respond with thoughtful comments, and face students who wish they just had a textbook with multiple-choice quizzes. If this sounds, personal, it is. It also points to the importance of morale. One factor that helps maintain that morale in the face of challenging teaching situations is the sense that one belongs to a professional learning community of like-minded colleagues who face the same challenges and support each other by sharing ideas and resources. That sense of shared effort and resulting confidence that the combined power of the group can overcome challenges contribute to the collective efficacy that
Bandura and others describe (Bandura, 1997). Kozeracki’s (2005) findings across the seven campuses in her study clearly support the conceptual framework of this study: unscheduled, hallway conversations remain a central source of learning for faculty. In addition, faculty expressed the important socializing effect of these spontaneous interactions. Part-time instructors have fewer opportunities to participate, as their time on campus is more limited (Kozeracki, 2005).

Multiple studies examine the effectiveness of various instructional practices. Ongoing, high quality, relevant professional development is certainly a crucial element in bringing to scale promising initiatives to increase student success rates (Edgecombe et al., 2013). However, the benefit of a new teaching practice or a new way of organizing classes pales in the face of the benefits to instructors—and by extension to the institutional mission as a whole—of a sense on the part of instructors that they are actively engaged in a shared effort to raise student achievement (Hodara & Jaggars, 2014). The results of the chi-square analysis refuted the hypothesis that the proportion of full-time instructors who report a sense of belonging to a professional learning community at their institutions would be significantly greater than that of part-time instructors. While this result is positive, it does not completely allay doubts. It might be that any instructor who took the time to complete the survey, which included a test of knowledge, is deeply committed to the profession and thus feels a sense of belonging to a professional community. It is also possible that respondents define membership in a professional community in various ways. This will be discussed further in the section devoted to construct limitation. It could also be true that employment status is unrelated to sense of belonging in a professional community. That, too, deserves full consideration.
Limitations

All studies are susceptible to limitations. The following section will include a discussion of three areas of limitation that affected this study. The first area is that of the survey itself. The second area of limitation was that of access to the targeted population. The third limitation involved two constructs fundamental to the exploration of the conceptual framework: collegiality and professional community.

Survey Limitations

This study consisted of a two-part survey. The demographic portion of the survey was largely adapted from a survey developed by the Foothill-De Anza Community College District as part of a multi-year study a decade ago to improve student performance by improving professional development. The survey was included in the appendix to a Carnegie Foundation for the Advancement of Teaching report (Gerstein, 2009). The Foothill De Anza Tenured Faculty Survey was disseminated at the time via Survey Monkey, a popular survey tool, to all tenured faculty in that district in the spring 2008 semester. Many of the questions were specific to the professional development opportunities and employment details unique to the two-college district (Foothill and De Anza) that serves the South Bay region of San Francisco. The survey queried respondents in detail about professional development: the topics, the delivery mode, the sources of the professional development (institution, academic department, outside sources), who delivered the professional development and reactions to that professional development. This study borrowed heavily from that survey.

The second portion of the survey for this study consisted of the ARIK-A. The authors, including Sherry Bell at the University of Tennessee granted permission to use
the ARIK-A and embed the instrument into Qualtrics for the purpose of this study. The assessment most often functions as a pre- and post-test (Form A & B) for professional development in various adult education settings. The assessment was fundamental to this study. However, it was not a perfect fit to the purposes of developmental reading instruction at the community college level as perceived by many respondents and illustrated by correspondence discussed earlier in the chapter. In fact, the necessity to take a test may have contributed to the disappointing response numbers. This is not a limitation of the instrument itself. The ARIK-A is a nationally-normed, psychometrically sound, standardized assessment that was developed to assess the knowledge of adult reading instruction as described in Research-Based Principles for Adult Basic Education Reading Instruction (Kruidenier, 2002). The limitation arose in the mismatch between the perceived purpose of reading instruction at many community colleges, the educational preparation of most instructors, and the focus of this assessment on knowledge of explicit components of reading. Many respondents began the survey, completed the demographic portion, and began but did not complete the assessment. Data were missing on many of the questions that involved specific terminology related to instruction of low-level readers. This might also be attributed to the electronic administration. Educators gathered in a room participating in a professional development workshop might be less apt to skip questions that present difficulty. The fact that respondents were facing only a computer may have contributed to the large number of missing data.

The demographic portion of the survey was long. A colleague at the Community College Research Center suggested that respondents might suffer “survey fatigue” (S. Bickerstaff, personal communication, July 24, 2015). The need to collapse many
responses was partially a result of there being too many answer choices to each question. Overall, the demographic portion of the survey would benefit from a tighter focus.

**Access Limitations**

The process of compiling the list of developmental reading instructors at the 112 California community colleges was time-intensive. It entailed the necessity to comb through the websites, catalogs, and class schedules of the individual colleges. Unfortunately, a neat list of developmental reading instructors in California does not exist, since very little research with this population has been conducted in the past. Professional organizations, such as National Association of Developmental Education or the National Literacy Association do not maintain databases with this information. Many colleges—though not all—list full-time faculty on the college website’s faculty/staff directories or in the sections of the catalog that describe individual departments. Part-time faculty is often not included. Many email addresses were inferred by studying the configurations of those that were listed and guessing at the patterns of those that were missing. That method was hardly failsafe judging by the number of emails that bounced back as “undeliverable.” The process also highlighted the transient nature of part-time faculty.

**Construct Limitations**

Two constructs formed the basis of the analyses conducted in the exploration of the conceptual framework of the study: collegiality and professional learning community. There is always a danger in employing abstract concepts in the search for objective evidence. Interpretation of abstract ideas is colored by personal experience and background. What one person perceives as “supportive,” another might find intrusive.
Collegiality is one such a concept. The variable SENSE OF COLLEGIALITY was created by summing agreement or disagreement with three statements in the survey; each statement on its own could be interpreted in various ways. One individual’s concept of collegiality—a sense that colleagues are supportive, respectful, friendly, and welcoming—might differ from another’s sense of collegiality. Some people thrive in that environment; others find it bothersome. A qualitative study that provides room for coding and deducing themes might be more appropriate to this question.

The second construct, which also approaches qualitative territory, is that of “professional learning community.” Again, the concept of a professional learning community might be interpreted in different ways. One conception of a professional learning community is that of an environment in which an individual believes there is mutual appreciation among colleagues for expertise and experience and a sense of collective energy. Developmental reading instruction is complex, as anyone who either studies the field or engages in the practice will attest. One of the primary challenges in working as a part-time instructor charged with the difficult task of motivating reluctant readers is the lack of interaction with like-minded colleagues with whom to share ideas. Yet, it is quite possible to conceive of a professional learning community in a different way. Once again, describing this as a limitation is an acknowledgment that abstract ideas are open to interpretation.

The final sections of this dissertation are devoted to a discussion of the implications of this research, recommendations for practice and policy, and ideas for future research. Like the conceptual framework that structures this study, the focal points of the Triangle of Instruction—student, instructor, and content—serve as the central
organizing principle of the final section of this dissertation. Those focal points also lend both purpose and urgency to the discussion.

**Implications and Recommendations**

This study, which includes the literature review, has raised awareness about many of the issues that beleaguer the field of developmental reading. One consistent theme is that of alignment—or lack of alignment. The educational pipeline is rife with jagged joints. As students move from high school to college, they often find that their high school achievement does not match the results of their placement tests in English or reading. Frequently, students who earned high grades in high school are advised to enroll in two or more semesters of developmental reading. The placement tests themselves are often implicated. Studies point to high numbers of placement errors. Students who might perform just as well in college English as do students with slightly higher scores are consigned to burdensome developmental sequences, which other studies claim reduce the likelihood of college completion (Bailey, Jaggars, & Jenkins, 2015; Bailey et al., 2010; Hern, 2010; Jaggars et al., 2014). Studies point to a mismatch between the placement tests and both the content of and student outcomes in the subsequent courses. (Willett, 2013; Rutschow & Schneider, 2012).

The Research and Planning Group for the California Community Colleges (2013) issued *A Guide to Transforming Basic Skills Education in Community Colleges Inside and Outside the Classroom* to address lack of horizontal and vertical alignment in developmental education programs. Lack of horizontal alignment occurs when many different instructors teach sections of the same course without processes in place to ensure that students emerge with the same knowledge and skills. Vertical misalignment
results from of lack of coherence between the levels of the courses in the sequence. Lack
of alignment is a recurrent theme in developmental education. It affects students, course
content, and delivery of instruction. The particular focus of this study, however, was
developmental reading instructors, their educational backgrounds, their primary teaching
responsibilities, and their sense of themselves as professionals in a field that is at the
same time distinct and interdisciplinary.

**Recommendation I—Instructor Qualification**

Brown and Niemi’s (2007) contention that many students enter the community
college unprepared for the rigors of college-level text is well-documented. Less attention
is paid in the literature to the fact that many instructors who are charged with preparing
those students for the rigors of college-level text are themselves unprepared for the
challenges of teaching reading to these students. This should not be construed as criticism
directed at instructors. The results of the survey underscore the rich and diverse
backgrounds that instructors bring to the profession. Many have advanced degrees,
including PhDs in English, English Literature, and Comparative Literature. Two
participants listed MFAs in Creative Writing. Many have received further training in
various reading initiatives, such as Reading Apprenticeship and have attended multiple
professional development activities over the years. It was evident from the survey that
instructors care deeply about their students’ success. The issue, again, is one of
misalignment. In this case, the mismatch is between the preparation available and the
particular knowledge and understanding needed to accomplish the goals of
developmental reading instruction. Only three of the 206 participants who responded to
that question listed Postsecondary Reading Certificates.
It is key to this discussion to examine the content of the 12-unit Postsecondary Reading Certificate program (four 3-unit classes) at California State University at Fullerton (CSUF); the programs in San Francisco, discussed earlier, and Los Angeles are similar (CSULA, n.d.; SFSU, n.d.). The content of these programs provides a useful lens through which to consider the more common preparation for teaching reading. The first course in the sequence includes background in the theoretical framework of the field, including historical perspectives, student/adult development, learning theory/academic literacy, curriculum design, and contemporary issues (CSUF, n.d.). Paulson and Armstrong (2010) underscore the crucial role of theoretical coherence in the field of developmental reading. They contend that a theory that foregrounds a sociocultural model of literacy, which considers the act of making sense from text from social, cognitive, and affective perspectives must guide developmental reading practice. This can proceed only from a stance of understanding about the participants and the context of instruction at the postsecondary level (Paulson & Armstrong, 2010). That context includes students from multiple cultures and ethnicities, low socioeconomic backgrounds, histories of school failure and learning disabilities. Many are not proficient in English.

Students with documented learning disabilities might approach instructors at the beginning of the semester with paperwork from the Disabled Students Programs and Services (DSP&S) office to request accommodations, to which they are legally entitled. However, this, too, is fraught with challenges. Instructors are required to provide the extra time, a note-taker, a quiet spot for testing—common accommodations requested by students—but the instructors often lack the training to provide knowledgeable assistance to students who could benefit from specific strategies to deal with their learning
challenges. In addition, the structure of most developmental reading classes does not allow individual attention, or even small group instruction, especially at the intense levels necessary for students who struggle with the basic components of reading. Adult students who have not mastered basic elements of phonemic awareness and phonics require direct, explicit, systematic instruction, which does not conform to the usual class structure at community colleges or the training of most community college faculty.

A second course in the postsecondary reading program, Literacy in the Academic Disciplines, emphasizes the unique ways that text is organized in the disciplines: science, math, and history (California State College at Fullerton [CSUF]). As discussed in the literature review, the focus on disciplinary literacy differs from that of content area reading as presented in the early grades, where the emphasis is on generic reading strategies, such as determining the main idea and identifying fact vs. opinion (Fang & Schleppegrell, 2008; C. Shanahan et al., 2011). This course focuses on what Holschuh and Paulson (2013) characterize as “text prep” (Holschuh & Paulson, 2013, p. 5): preparation for text complexity that includes focus on text coherence, organization, and the conventions unique to the various disciplines (T. Shanahan et al., 2012). In order to guide students to recognize the unique attributes of communication style that distinguish each discipline, instructors must first understand those differences themselves.

The third course in the Postsecondary Reading Certificate focuses on the influences of linguistic, social, cultural, physical, psychological, intellectual, and educational factors involved in learning to read and reading to learn, effectively erasing the dichotomy between “first you learn to read, and then you read to learn,” which has dominated the field. Instead this approach entails acknowledgement that reading involves
a constructive set of connections that take place in a particular social network—in this case, college (Holschuh & Paulson, 2013). Paulson and Armstrong (2010) concur. They stress the importance of including an understanding of identity and the particular contexts that community college students navigate as they construct knowledge in this unfamiliar environment.

The final course in the Postsecondary Reading Certificate Program is Program Management, which includes multiple components, including class design and current trends related to managing a postsecondary reading and learning program (CSUF, n.d.).

Paulson and Armstrong’s (2010) contention that developmental reading instructors must develop expertise in disciplinary literacy and academic language is well-founded. They must teach from a stance of understanding the unique needs of postsecondary students.

The first recommendation, therefore, is the promotion of postsecondary developmental reading as a specialized profession with its own set of credentials and continuing education opportunities. Require specialized credentials in postsecondary reading instruction, rather than generic reading, as a condition of hire for reading instructors. The burgeoning interest in graduate-level training for postsecondary reading instructors is a positive trend. Professionalizing the field stands to benefit the many students who need the specialized knowledge that such a credential offers instructors and has the potential to promote student progress toward completion. Research attests to the contribution of long developmental sequences on low completion rates. The literature describes many ideas for breaking down that barrier that have gained traction: avoidance, contextualization, acceleration, mainstreaming, and integration of reading and writing.
Each has a place; each strategy works well at some institutions with some groups of students. Increasing the theoretical and pedagogical knowledge of reading instruction specific to postsecondary students has the potential to benefit all developmental reading students and their instructors.

**Recommendation II—Oversight of Trajectory**

The Research and Planning Group (RP Group) (2013) in its “Guide to Transforming Basic Skills in the Community Colleges” advocates improved alignment to promote students’ smooth transitions through developmental courses and into the college-level courses for which they are preparing. Students arrive at college with uneven preparation that begins with their earliest educational experiences. Poverty is often the culprit. Evidence clearly indicates that students from impoverished schools perform less well than do their more privileged peers. Reading proficiency is measured regularly in the K-12 sector. Data are published in the newspaper each summer to reveal the year’s reading and math proficiency scores for each high school in the state. Teachers in the primary grades in schools that allocate money for such materials spend a great deal of class time administering periodic informal reading assessments to best match their students with reading material. Many reading programs publish leveled readers. Students are encouraged to choose certain levels of text for independent reading and slightly higher levels of text for instruction. All public schools conduct regular standardized testing as students move through their K-12 years. Overall, reading proficiency is tracked carefully as students move up through the grade levels. An individual student’s reading proficiency is measured against grade-level benchmarks. That picture changes dramatically once students enter college. Often, a student’s final standardized test is the
Student Achievement Test (SAT) or one of the standard college placement tests. These tests are administered for placement only; they are not diagnostic and do not provide information about areas of weakness to inform instruction. Once students place into a developmental or a college-level course, a course grade is often the only measure of performance. Although many college issue course outlines to instructors who teach the same course in an attempt to create uniformity, various sections actually have little in common (The Research and Planning Group for California Community Colleges, 2013). As noted earlier, the vertical alignment, or the articulation from one level to the next higher level, is also problematic. Overall, systems are not in place to promote ongoing coordination and communication to ensure comparable learning experiences for all students.

In a study of California community colleges, Grubb and Gabriner (2013) note the absence at either the state or local levels of uniform guidelines to determine the content at different levels of basic skills. One of the principle recommendations of the California Student Success Task Force (2012) was improved alignment system-wide (California Community College Student Success Task Force, 2012). Grubb and Gabriner (2013) ascribe the general lack of alignment to the fact that no one is in charge of the entire trajectory of basic skills from initial assessment, through basic skills and into the first-level college courses. They suggest the formation of basic skills committees to oversee horizontal and vertical alignment from placement in to exit from developmental education. They acknowledge that an overriding focus on alignment is fundamentally an institutional challenge: “It would require a departure from the laissez-faire college where students do as they please, instructors teach the courses they want, and counselors ignore
the consequences of misplacing students in the sequence of basic skills courses (Grubb & Gabriner, 2013, p. 168).

Cohen and Brawer (2008) suggest that setting standards for exit criteria is in conflict with the open access mission of the community colleges, since doing so privileges social norms over individual norms. They also note that “several attempts to engage instructors in defining the outcomes of their courses in specific measurable terms have failed” (p. 311).

Though measuring course outcomes in a standardized way across programs or institutions is unlikely to gain favor, measuring reading achievement in school is standard practice that could be implemented at the community college level. However, Afflerbach (2005) cautions against resorting to high stakes reading assessments to make decisions with highly consequential outcomes for students, even in the lower grades. In the highly idiosyncratic world of developmental college reading, the imposition of reading tests to determine student progress poses the very real danger of alienating instructors, constricting curriculum, and disrupting high quality teaching and learning, just as Afflerbach contends testing affects teachers in general (Afflerbach, 2005).

The second recommendation is the implementation of a basic skills committee as suggested by Grubb and Gabriner (2013) to oversee the entire trajectory of student progress from placement to the gateway college courses. This recommendation considers the various perspectives suggested by both research and personal experience. With solid leadership from a well-informed dean and institutional support in terms of time and resources, basic skills faculty can collaborate with transfer-level faculty to create coherent learning experiences for students. Many colleges are seeking ways to mirror
learning experiences for all students typical to the career-technical arena. These programs carefully map out the skills needed by students at each course level and ensure students acquire those skills in the preceding course (K. Linduska, personal communication, December 4, 2015). The guided pathway approach is quickly gaining traction in California as well as nationwide (Bailey et al., 2015). The goal of colleges that are adopting this approach, which provides guidance by directing students to a logical sequence of classes within areas of interest, or majors, is to increase completion and help students reach their goals more efficiently. Critics object that such an approach is overly prescriptive and infringes on academic freedom (Grubb & Gabriner, 2013). However, no one argues with the basic supposition that times have changed; students have changed; the workforce has changed. The pipeline needs to reflect those changes.

**Recommendation III—Targeted Professional Development**

The focus on professional development in the study was deliberate. There is generalized criticism of professional development opportunities available to instructors. The purpose of this dissertation overall was twofold. One goal was to determine what developmental reading instructors know. The second goal was to determine what developmental reading instructors need, in terms of support and professional development, to increase that knowledge. The ARIK-A assessed knowledge in five discrete areas, those identified by the Adult Literacy Research Working group only. It did not address the theoretical underpinnings that the postsecondary reading credentials in the last section describe, nor did it investigate instructor knowledge about the affective, social, and cultural factors that play such a crucial role in the lives of the students who fill developmental reading classrooms. This mismatch between what instructors experience
day-to-day in their classrooms and the objective nature of the ARIK-A was at the heart of many of the critical emails.

That reaction was not surprising. The ARIK-A was developed for use with a diverse group of instructors in a wide range of traditional and nontraditional adult education settings. The needs of adult learners overall vary widely. Many have diagnosed or undiagnosed learning disabilities; it is estimated that approximately 17% of adults in adult basic education classes read at or below the grade 6 level (Afflerbach, 2005). The needs addressed in community college developmental reading courses reflect a different focus. While students who enter a California community college struggle with learning disabilities and low reading levels just as do students in adult basic education settings in general, the reading placement tests administered upon college entry are not designed to diagnose the origin or extent of those difficulties. They merely determine a student’s ability to read a number of passages effectively enough to answer a series of comprehension questions in a given amount of time. Class sizes are usually large—more than 30—and not structured to address individual difficulties in alphabetics or fluency that may underlie struggles with comprehension. Instead, instruction focuses mostly on generic comprehension strategies: locating the main idea and supporting details, vocabulary development, determining author’s purpose and similar strategies. The objective of developmental reading instruction is theoretically to help students gain tools to manage the vast amount of textbook and other reading they will encounter in their college-level courses. The effectiveness of that instruction is open to discussion.

However, it would be disingenuous to criticize a decontextualized instructional focus on reading disconnected paragraphs and identifying main ideas, or words that
signal various kinds of transitions (e.g., such as; on the other hand; because) and at the same time judge the level of an instructor’s knowledge based solely on a test of discrete decontextualized fragments of that knowledge.

This is an opportunity for both department and institutional leaders to target more precisely the needs of the thousands of students who place into developmental education each year. This is also an opportunity to take advantage of the current climate, one of both belt-tightening and audit of current practices, to effect change. One change is related to professional development; the other entails structural change that takes advantage of the Adult Education Block Grant, an outcome of the 2014-2015 California Assembly Bill 86 planning process.

The third recommendation is the differentiation of professional development to meet the specific instructional needs of instructors whose primary levels of instruction differ. Instructors who teach three or four levels below college-level benefit have different professional development needs than those who teach accelerated courses. Instructors who teach at the lower levels benefit from professional development that builds expertise in instruction on the reading component basics: phonemic awareness, fluency development, vocabulary, and comprehension strategies. This instructional focus need not be dry and decontextualized, but it must begin with explicit instruction and proceed systematically. Learners at this level require more scaffolds, more opportunities to practice with immediate feedback, carefully constructed independent practice designed to reinforce learning and build confidence. Many developmental reading students who pursue their educations at a community college have not yet reached the point in their learning when they are able effectively to assume the responsibility that the instructor is
releasing in the higher-level accelerated or integrated courses. Many students at these levels struggle to read a sentence fluently; a focus on disciplinary literacy is premature. Placement tests are inexact measures. They are implicated in the consignment of students to unnecessary semesters of developmental reading (Bell et al., 2013; Kruidenier, 2002; MacArthur et al., 2010; McShane, 2005). Data from CAP as well as the results of studies that have evaluated CAP confirm that a well-conceived accelerated option that integrates reading and writing and embeds the experience in an environment sensitive to the cultural and affective needs of students works well for many students. Acceleration increases both persistence and completion for many students (Bailey et al., 2010; Edgecombe et al., 2013; Hern, 2012, 2016). Yet, students with other challenges—recent immigrants who have not yet fully mastered the language, U.S.-born students whose home languages are not English, students with learning disabilities who enroll in college despite cognitive and developmental disabilities—these students need instructors who are experts in other ways. The mission of the community college is open access. All students need instructional expertise. Professional development should be differentiated to more closely match the differentiated needs of the instructors who teach the students who are there. Ample evidence, both anecdotal and research-based, confirms the crucial role played by professional development, in both building instructor knowledge and enhancing collective efficacy. Murray (2001) asserts that the presence or absence of effective faculty development may determine the difference between faculty burnout and revitalization (Murray, 2001). A finely-grained program of professional development that meets precise instructional needs will enhance the potential of developmental instructors
to deliver and design teaching effective teaching experiences for students at all levels (Bickerstaff & Edgecombe, 2012; Hern & Snell, 2013).

**Recommendation IV—Active Promotion of Legislation**

The 2013-2014 California budget allocated $25 million to the California Community College Chancellor’s Office (Assembly Bill 86) to fund a two-year planning grant to improve adult education. Seventy consortia, each consisting of the community college(s), K-12 adult schools, and community partners in each consortium district were organized to carry out the initiative. The plans were submitted to the state in March 2015, although they continue to evolve as new ideas are incorporated. The plans are comprehensive. They outline five broad areas: basic skills, career-technical, ESL, apprentice programs, and programs for students with disabilities. The planning phase entailed an in-depth inventory of the programs in place in each area, illuminated overlaps and gaps, and conceived ideas to expand and improve delivery of adult education statewide. The process continues with the passage of Assembly Bill 104 and the 2015-2016 state budget, which allocated $525 million statewide to fund the Adult Education Block Grant (AEBG), the implementation phase of AB 86. The San Diego Adult Education Consortium alone received $3.6 million. These funds from the state represent an opportunity to better serve students who benefit from intensive focus on the reading skills that underlie comprehension.

The fourth recommendation is the active promotion of legislation with potential to benefit developmental reading and other basic skills students. This worthwhile investment of time and energy stands to benefit students at least as much as familiarity with a particular reading strategy. This is a responsibility. In this case, the Adult
Education Block Grant might be employed to relocate reading instruction at three or four levels below college-level to the Continuing Education (non-credit) and K-12 adult school environments. This recommendation is supported by two facts. First, instructors whose primary level of instruction is three to four levels below college-level performed significantly better on the ARIK-A than instructors who teach accelerated reading or integrated reading and English. Furthermore, the ARIK-A was created to facilitate professional development of adult educators who focus on the basic components of reading as identified by the National Reading Panel (Bell et al., 2013). These facts underscore a very real difference in the needs of students—and the knowledge bases of their instructors—who place at the lowest levels of developmental reading. Students who struggle with the elements of alphabetic and fluency need explicit individual or small group instruction that guides them systematically through the basic component reading skills. Until students are able to read with a degree of fluency and have achieved a level of word analysis skills that enable them to comprehend and synthesize sophisticated content, they are best served in classes that allow focused, individualized attention from instructors with specific knowledge in addressing those elements of reading. Noncredit and K-12 Adult settings are more appropriate for this class structure than are large, heterogeneous community college developmental reading classes.

Direct involvement with the AB 86 planning process from 2015-2015 offered many occasions to engage in conversation with local leaders of the process. They pointed out how such a move might benefit the community colleges, the noncredit institutions, and students without loss of funding. Currently, CE funding is distributed from the general fund according to a formula that has been in place for many years. That system
has created an incentive for the community colleges to retain as many developmental education classes on their campuses as possible. However, the presence of the lowest level developmental education students has some adverse effects on community colleges. Primarily, these classes are implicated in high rates of attrition (Bailey et al., 2010; Hern, 2010). The AEBG has the potential to change that dynamic. If the lowest level developmental education offerings were funded by the Block Grant, rather than the community college, and moved to Continuing Education and K-12 Adult school settings, both students and the community colleges would benefit. Students would have more financial aid available for classes that count toward graduation or transfer. The flexibility in CE and K-12 adult settings allows for smaller class sizes, imperative for students who require concentrated, individualized or small-group instruction. The community colleges would benefit, too. Popular, impacted programs in health care, career-technical fields, and business would have space to expand, thus replacing the FTEs lost by the departure of reading (and other basic skills) classes. This plan could ultimately improve completion rates at community colleges overall (T. Pawlak, personal communication, January 23, 2016).

Two issues need to be addressed. As it is, classes offered in K-12 adult or CE do not qualify for federal financial aid, which deters students from that option, even though the environment might be more suitable. Another potential issue is one of faculty perception. Although, salary schedules at CE and the community college are equal in the San Diego Community College District, this is not always the case. Even so, instructors might resist a move to an environment perceived as less prestigious.
California Assembly Bill 770 signed in 2015, which allocated $60 million to fund the Basic Skills and Student Outcomes Transformation Program is another example. Faculty and administrators who stay apprised of national and state initiatives with potential to benefit community college students are ideally positioned to affect local change. Students deserve the full power of our collective effort.

**Conclusion and Future Directions**

At the beginning of my career in education, I believed that the ideal activity or lesson or book existed that would provide the guidance I needed to engage the interest and meet the learning needs of every student, including the highly gifted students, those who were average, and those with learning disabilities. As an elementary school teacher responsible for every subject, of course, I needed the perfect math activity, the perfect reading activity, the perfect science activity, the perfect social studies activity, and so on. My storage unit bursts with hundreds of books about curriculum, children’s trade books on every subject, and boxes crammed with math manipulatives, art and social studies posters, artifacts, and student work that I used to model my expectations. I was the poster person—at least in terms of sheer volume of teaching materials—for Shulman’s “pharmacopeia” of teaching (Shulman, 1986, p. 10).

Since then, my understanding about learning and teaching have become more refined and more realistic. It became clear to me as a part-time instructor that many factors are beyond our control. We cannot control our students’ backgrounds, nor are we capable of changing their preconceived ideas about school in general, their mindsets (Dweck, 2006), or their notions about where they fit in the grand scheme—most of the time. We teachers thrive on the rare occasions when someone tells us that we have
changed his or her life. Nowhere is this more poignant than in the world of adult literacy. In a literate world with an ever-growing dependency on text, the inability to make sense of text is a serious impediment.

Students arrive at community colleges with an array of goals: some pursue career-technical certificates, others hope eventually to transfer to four-year institutions, and many are not yet sure why they are there. But up to 80% of them begin by enrolling in a developmental reading course, since literacy skills are fundamental to any goal. It is therefore incumbent upon us to do whatever it takes to design our reading classes to promote our students’ goals rather than create obstacles to their success.

At one time I believed that behind closed doors I could create the ideal learning environment for my students; however, my perspective has since matured. Education is not a singular activity at all. I now recognize the exponential power of collective efficacy. Teachers need opportunities to collaborate with colleagues, build knowledge, and receive insightful feedback. Brinson and Steiner (2007) assert that school leaders face many challenges but ensuring that faculty has opportunities to build confidence and instructional knowledge is the most important challenge they face. This, of course, requires leadership that can engage stakeholders at every level—including the classroom—not to dictate change but to formulate the right questions. Holschuh and Paulson (2013) provide a guide: “How does reading connect to departments, institutions, and national policies? How do the lenses we use to view college reading impact our approaches to instruction” (p. 5)? We will gain clarity about many of the issues that plague the field of developmental reading in the search for the answers to these questions.
My hope is that this dissertation is not an end but a beginning, and that others will build on my research as I have built on the research of others. What I find personally most satisfying about belonging to a professional learning community is exactly that—the sense that I am part of a community of learners and thinkers in this profession that is involved in the joint venture of constructing ideas and building understanding to benefit developmental reading students and their instructors.
REFERENCES


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APPENDIX A

Data Collection Surveys

Exempt Verification
Reg.: 46.101(b)(2)

May 22, 2015

Principle Investigator: Ms. Tina Kafka
Co PI/ Faculty Sponsor: Dr. Doug Fisher
Department: Education Leadership
vIRB Number: 2095098

Developmental Reading Instructors: What They Know; What They Need to Know More.

Dear Ms. Tina Kafka,

The above referenced research was reviewed and verified as exempt in accordance with SDSU’s Assurance and federal requirements pertaining to human subjects protections within the Code of Federal Regulations (45 CFR 46.101). This review applies to the conditions and procedures described in your protocol.

The determination of exemption is final and requests for continuing review (Progress Reports) are not required for this study. However, if any changes to your study are planned, you must submit a modification request and receive IRB verification that the modification is exempt (per 45 CFR 46.101). To submit a modification request, please follow the necessary steps below:

Modification steps:

- Access the protocol via the Webportal (https://sunspot.sdsu.edu/pls/webapp/web_menu.login/)
- Protocol main page click on “Modifications” to enter a report
- Once the report has been fill out completely, click “submit”
- Make sure to email the IRB (irb@mail.sdsu.edu) notifying them that a modification has been submitted.

Additionally, please notify the IRB office if your status as an SDSU-affiliate changes while conducting this research study (you are no longer an SDSU faculty member).

Sincerely,

Patricia Gordon

Patricia Gordon BS, MBA, CIP
Research Affairs Analyst/HRPP
SDSU Institutional Review Board
APPENDIX B

Recruitment Announcements and Consent Form

Dear Esteemed Colleague,

I am an adjunct reading instructor at Southwestern College in San Diego County and am working towards a doctorate degree (Ed.D.) in Educational Leadership at San Diego State University. My supervisor is Doug Fisher, a professor in my department at SDSU and the author of several books and articles about reading instruction. My dissertation study seeks to understand and document how much we community college reading instructors know about research-based developmental reading instruction. I am also investigating how our colleges can best support us in terms of professional development and leadership.

I am reaching out in hopes that you will agree to participate in this study. If you decide to participate, you will be asked to complete an online survey. The instrument itself is a standardized, nationally normed assessment developed by Steve McCallum, Sherry Bell, and Mary Ziegler (2013) under the auspices of the Adult Literacy Research Working Group, a project of the Partnership for Reading administered by the National Institute for Literacy. It was designed to evaluate the knowledge of instructors who teach reading to adults in traditional and non-traditional educational settings for purposes of professional development. This is the first time this instrument will be used in this way at California community colleges.

In addition, you will also be asked to answer some demographic questions, to determine information including the length of time you have been teaching developmental reading at a community college, your employment status (full time or adjunct), and the amount and nature of professional development offered by your college. The survey will take 30-45 minutes to complete. At the end of the survey, you will have the opportunity to enter a drawing to win a $25 Amazon gift card. I will distribute 40 of these gift cards. The contact information gathered from you in order to distribute prizes will never be connected to the answers you provide on the survey. Each participant can only win once. The drawings will take place 4 weeks following the final email reminder. I will create a table in Word, copy each email address into one uniform-sized box in the table, cut the table into uniformly-sized slips of paper, and draw one name at a time from a hat until the 40 gift cards are accounted for.

You might wonder how I found your contact information. I hand-searched the catalogs and spring class schedules of each of the 112 community colleges in California. It was a time-consuming task but one that I hope will contribute to improving outcomes for our developmental reading students, an issue about which I care deeply. I know that you do, too. Our work changes lives.

Institutional Review Board

Study Number: 2095098
Your participation in this study is voluntary. If you decide to participate, your responses will be anonymous - that is, recorded without any identifying information that is linked to you. If you have any questions regarding this survey, please contact me at (619)750-7574. You may also contact the Institutional Review Board at SDSU (619-594-6622) to report problems or concerns related to this study.

Once I have analyzed the results, I will send out a summary of the results to the participant list.

Your selection of this link will take you to the survey. The completion of the online anonymous survey implies your consent to participate in this research project.

I thank you in advance,

Tina Kafka
APPENDIX C

Study Survey

Block one

Demographic Information

How long have you been teaching developmental reading at a community college?

Less than a year
Between one and five years
More than five years

What developmental reading level do you teach most often?

Four levels below credit English
Three levels below credit English
Two levels below credit English
One level below credit English
Accelerated

Which of the following best describes your job status?

Part time adjunct
Full time tenured
Full time non-tenured

Select the option that best describes how you qualified to teach developmental reading at a community college.

MA in Education with specialization in teaching reading
BA in another academic discipline + MA in English, literature, applied linguistics, composition, TESL, psychology, or equivalent + 12 semester units of teaching reading
Other: Please describe your equivalency

Please identify your gender.

male
female
With which racial or ethnic group(s) do you most identify?

____________________________________

What is your age?

2 to 28 years old
9 to 35 years old
6 to 42 years old
43-55 years old
56-66 years old
67 years old or older

In which region of California is your community college located?

____________________________________

Over the past 12 months, how often did you participate in the following department-sponsored professional development activities (e.g., department meetings, retreats, department-sponsored classes and workshops)?

Never
1-2 times
3-4 times
5 or more times

Over the past 12 months, how often did you participate in the following college-sponsored professional development activities (e.g., staff development workshops, tenure review, professional development workshops)?

Never
1-2 times
3-4 times
5 or more times

Over the past 12 months, how often did you participate in the following District-sponsored professional development activities (e.g., Opening Day, flex days)?

Never
1-2 times
Over the past 12 months, how often did you participate in faculty-delivered activities (e.g., symposia, lectures, observing fellow faculty through classroom visits)?

Never
1-2 times
3-4 times
5 or more times

In the past year, how many outside conferences or workshops have you attended that were relevant to developmental reading instruction?

Never
1-2 times
3-4 times
5 or more times

In the past year, how many distance/online courses have you attended that were relevant to developmental reading instruction? ________________

Are you pursuing or have you obtained an advanced university degree (graduate or post-doc) relevant to developmental reading instruction? ___________

Over the past year, how frequently did your professional development focus on: the content/subject area of your teaching (e.g., English, reading, ESL)?

Never
1-2 times
3-4 times
5 or more times

Over the past year, how frequently did your professional development focus on: pedagogy (instructional strategies specific to developmental reading instruction)?

Never
1-2 times
3-4 times
5 or more times

Over the past year, how frequently did your professional development focus on: 
adult learning?

Never
1-2 times
3-4 times
5 or more times

Over the past year, how frequently did your professional development focus on: 
other topics relevant to developmental reading instruction? _________

What type of support and/or activities are you able to access for professional 
development? (Please check all that apply.)

meetings, conferences, opportunities to talk with colleagues 1:1, opportunities to connect 
with faculty in my department, opportunities to observe a peer teaching, curriculum 
planning with colleagues, lesson planning with colleagues, conferences or workshops, 
professional associations

My department is a professional learning committee for faculty.

strongly disagree disagree agree strongly agree don’t know

My division is a professional learning community for faculty.

strongly disagree disagree agree strongly agree don’t know

My department encourages faculty to try new teaching strategies.

strongly disagree disagree agree strongly agree don’t know

Tenured faculty are supportive of part time faculty.

strongly disagree disagree agree strongly agree don’t know

My college promotes collegiality and support among all faculty, including adjuncts.

strongly disagree disagree agree strongly agree don’t know

My department/college/or district provides useful professional development that is 
germane to my teaching.


strongly disagree     disagree     agree     strongly agree     don’t know

Do you teach at multiple campuses, either within one CC District or across districts?
   yes          no

Do you now or have you taught reading or English in the K-12 sector?
   yes          no

What suggestions do you have to improve professional development opportunities for all developmental reading faculty?
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________