Developing College Ready First Generation College Students: Using Student Experiences to Envision a Practicable Approach to Studying and Addressing the Problem

by

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Dedication

This dissertation is dedicated to my family. I dedicate it to my wife, Dr. Jennifer Lofgren, whose example, support, encouragement, and understanding are as much a part of this work as my own efforts. I dedicate it to my parents, whose guidance and material support made college-going a foregone conclusion for me, even it was not for them. And, I dedicate it in no small part to my daughter, Grace, who hopefully will now much less frequently hear me answer: "I'll be there in minute after I finish this one more thing."

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I am very grateful to my dissertation committee on a number of fronts. I cannot thank them enough for investing hours upon hours in me and my work. I am thankful to them for helping me use this research to not just generate knowledge but also grow as an educator and "get smart" about an issue I care about. I am also thankful for their early advice to find a direction about which I am passionate because a dissertation can, in fact, be a long road. And, I am better for being reminded to think harder about the students that can be marginalized by the very educational forces I explore in my study.

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Abstract

Background: First generation college students, whose parents' highest earned degree is a high school diploma, go on to earn postsecondary degrees less often than their peers whose parents have a college degree. A current approach to addressing this problem is making sure "first gens" are ready to succeed in college.

Purpose: There are three extant bodies of scholarship that are potentially useful to researchers and educators who want to think and reason about first gen college readiness. However, leveraging these literatures is difficult because each focuses on a distinct dimension and fails to precisely define its core concepts. The purpose of this study is to coalesce the literatures into an initial framework and, by putting this framework into dialogue with students' lived experiences, synthesize and conceptually clarify the research scholarship underlying the framework.

Research Design: In this study, I compare five in-depth qualitative case studies of first gen (n = 3) and non-first gen (n = 2) students who attend the same early college program. I collect data through interviews with the students contextualized by interviews with their teachers and advisors. Using structured, focused cross-case comparisons, I discern in what ways the participating first gen students and non-first gen students do and do not differ in how they (a) conceive of college readiness and (b) experience its development. I then map the students' conceptions onto the framework.

Findings: The study's framework brings together from the literature three dimensions for understanding first gen college readiness: (a) student capacities that constitute readiness as well as the ways that (b) educational contexts and (c) students' communities affect the development of readiness. These dimensions fit the experiences of the first gens in this study, thereby substantiating the framework's broad foci. Mapping the first gens' narratives onto the framework also (a) exemplifies how we can think cohesively about all three dimensions and (b) concretely visualizes the core concepts of each dimension. However, research foregrounding first gens' transitions to college raise additional critical questions about institutional conceptions of college readiness and the roles such conceptions might play in shaping first gens' postsecondary experiences. These questions bring attention to: (a) an educational program's

cultural norms that first gen students must adapt to; and (b) the ways in which first gen students make sense of their own cultures and identities as they enter into an educational program's culture.

Implications: The conceptual ideas captured in the resulting framework have the potential to bracket and focus the work of researchers and educators, pointing them to student capacities, contextual elements, and community factors that can be important to understanding first gens' development of college readiness. And yet, this study also concludes with equally important questions about whose cultural norms drive conceptualizations of college readiness and how colleges can be more culturally and practically 'student ready' for first gens.

Chapter 1 - Overview

Introduction

First generation college students—those whose parents' highest earned degree is a high school diploma (Nuñez, Cuccaro-Alamin, & Carroll, 1998)—make up roughly one-third of students matriculating in postsecondary institutions (Cataldi, Bennett, & Chen, 2018). Unfortunately, the "first gens" that make up this sizeable proportion of college students are far less likely to attain a postsecondary degree compared to their "non-first gen" peers: that is, those whose parents have a college degree (Nuñez et al., 1998; Redford & Mulvaney Hoyer, 2017). Across the last three decades, a varied body of research has emerged that seeks to address this concern. Through that research, scholars have called for ensuring that first gens possess and mobilize the skills and knowledge that ready them for college.

In this study, I synthesize the existing bodies of scholarship into a framework that can help us to think and reason about the development of first gens' college readiness. I then explore that framework by learning from first gen (and non-first gen) students about their preparation for college-level study. Based upon what those students say, my purpose is to strengthen and advance the current thinking about how we investigate and promote first gens' development of college readiness.

Statement of the Problem

In the U.S. economy, a postsecondary degree has become increasingly necessary for obtaining a job and achieving financial wellbeing. In recent years, over two-thirds of job openings have required a postsecondary credential or some college education (Carnevale, Smith, & Strohl, 2013). Perhaps as a result, those with a college degree more often reach and stay in the middle-income class, and a degree is now essential for climbing into the upper-income class (Carnevale, Smith, & Strohl, 2010; Glazer & Grimes, 2016). Furthermore, Americans with postsecondary credentials consistently experience higher wages, higher average lifetime earnings, and better wage growth (Carnevale, Jayasundera, & Gulish, 2016; Carnevale et al., 2010).

Unfortunately, a postsecondary degree all too often eludes students who would be the first in their families to earn one. First gens are less likely than their peers to obtain a postsecondary credential (Choy, 2001; McCarron & Inkelas, 2006). Moreover scholars find that first gens, compared to non-first gens, can have lower GPAs as well as lower course completion, credit accumulation, and persistence rates (Chen & Carroll, 2005; Warburton, Bugarin, Nuñez, & Carroll, 2001); and there is literature indicating that first gens can be less academically and socially engaged in college (Mehta, Newbold, & O'Rourke, 2011; Pike & Kuh, 2005).

One approach to improving postsecondary outcomes and experiences has been to ensure that students are ready for college. For the purposes of this analysis, I define "college readiness" as a student possessing the skills and knowledge that allow her to enroll and succeed in a postsecondary institution (Conley, 2011). These skills and areas of knowledge include not just those related to academics. College readiness also entails a student being able to manage and take ownership of her learning, and it encompasses the knowledge needed to access and navigate the college environment. (Annenberg Institute for School Reform, John W. Gardner Center for Youth and Their Communities, & University of Chicago Consortium on Chicago School Research, 2014; Conley, 2014; Mishkind, 2014).

Research specific to first gens reinforces the idea that whether they are college ready can have an impact on their postsecondary outcomes and experiences (Bui, 2002; Byrd & MacDonald, 2005; Reid & Moore, 2008). By extension, there are some who argue that first gens' postsecondary difficulties occur because they lack, or less often mobilize, the skills and knowledge that enable success in college (Mehta et al., 2011), and therefore educators need to *support and build* first gen students' skills and knowledge (Davis, 2010).

Critical scholarship presents an alternative view on how first gen college readiness relates to first gen postsecondary success. This view acknowledges that first gens and their families possess forms of cultural capital that could benefit their pursuit of a postsecondary education (Nuñez, 2005; Nuñez & Sansone, 2016). First gens' forms of cultural capital may not help them in college, however, because there can be systemic barriers to them mobilizing that capital to their benefit. Namely, these scholars argue that dominant cultures within postsecondary institutions can expect students from marginalized populations (e.g., students of color, low-income students, and first gen students) to take responsibility for mastering and mobilizing forms of capital that are normative in those dominant cultures (Castro, 2013; Convertino & Graboski-

Bauer, 2018), rather than meeting students where they are culturally (Gay, 2018; Welton & Martinez, 2014). These scholars also state that, in setting such norms, postsecondary institutions may not recognize or value marginalized students' cultural capital (Majors, 2019; O'Shea, 2016; Stephens, Fryberg, Markus, Johnson, & Covarrubias, 2012) while also failing to recognize a disproportionate, systemic inequity in how educational institutions ready marginalized students to meet said norms (Castro, 2013; Majors, 2019).

Therefore, first gens may experience less academic success and satisfaction because they are not prepared to meet expected standards of college readiness, retain capabilities that their colleges do not recognize as forms of college readiness, or perhaps both.

The Need for a More Practicable Approach to Understanding the Problem

In the preceding perspective on the problem, scholars suggest that college readiness is a central issue to consider when trying to understand why first gens' struggle more in college. There are three bodies of scholarship that study or theorize about college readiness, and each has the potential to contribute to understanding the problem. There are two barriers to these contributions being practicable, however. The first is that, *across* the three bodies of scholarship, each focuses on a distinct angle or dimension. The second is that, *within* each dimension, scholars differ so much in how they describe their central concepts that they fail to clearly explain those concepts for other people. Those seeking to support first gens thus face the dual challenge of having to integrate this scholarship and interpret its core concepts in ways that the scholars themselves do not, which is a very tall order. From that, then, follows the need to (a) coordinate these three strands of research into a coherent framework and (b) clearly visualize its supporting concepts. Such a framework would be potentially useful to educational professionals and researchers when designing and critically examining approaches to developing college readiness in first gen students.

How the Scholarship Currently Informs the Study of First Gen College Readiness

The first of the three bodies of scholarship that I reference is concerned with identifying if students are college ready. These scholars contend that it is possible to measure if students are college ready by identifying if they possess certain skills and knowledge (Conley & Darling-Hammond, 2013; John W. Gardner Center for Youth and Their Communities, 2014; Karp & Bork, 2014). These include what students should know and be able to do academically, what they should do to manage their own learning, and what they should know about getting into and

being at college (Conley, 2003, 2011, 2012, 2014). The scholars look for students to exhibit those types of skills and forms of knowledge because there is evidence that they contribute to students succeeding in college (Annenberg Institute for School Reform et al., 2014; Conley, 2007, 2012; Mishkind, 2014). That evidence includes the perspectives of experienced professional educators, like university faculty, readiness advocates, and their secondary partners, who say that those types of skills and forms of knowledge are essential to meeting postsecondary expectations and earning a degree (Conley, 2003; Gurantz & Borsato, 2012). Researchers also find empirical evidence to link those types of skills and forms of knowledge with benefitting students' postsecondary outcomes like grades or persistence (Karp, Hughes, & O'Gara, 2011; Kitsantas, Winsler, & Huie, 2008; Mokher, Leeds, & Harris, 2018; Nagaoka, Roderick, & Coca, 2009; Nakajima, Dembo, & Mossler, 2012; Plank & Jordan, 2001; J. S. Smith & Wertlieb, 2005; Somers, Woodhouse, & Cofer, 2004; Trockel, Barnes, & Egget, 2000; C.-C. D. Wang & Castaneda-Sound, 2008) .

There are some researchers who apply this method of measuring college readiness to first gens specifically. Most of these scholars at least assess whether first gens exhibit college ready skills and knowledge more or less often than non-first gens do. In some of these studies, the researchers also determine if any noted differences in first gens' and non-first gens' college readiness then account for differences in first gens' and non-first gens' respective postsecondary outcomes (Pascarella, Pierson, Wolniak, & Terenzini, 2004; Pike & Kuh, 2005; Saenz, Hurtado, Barrera, Wolf, & Yeung, 2007).

The second scholarly approach is concerned with identifying educators' curricular, instructional, and organizational best practices that can develop college readiness in students. Researchers operating in this arena study educational programs across the secondary and postsecondary levels that may support the development of college readiness (Boroch & Hope, 2009; Bowles & Brand, 2009; Hooker & Brand, 2009), and they describe what it is about the design of those programs that may do so (e.g., Barnett, 2016; Barnett, Bucceri, Hindo, & Kim, 2013; Barnett et al., 2012; Conley, 2003; Karp, 2007; Karp & Hughes, 2008b). Some of this research specifically contributes what works well for developing college ready first gens (Berger et al., 2013; Engle, Bermeo, & O'Brien, 2006; Tierney, Bailey, Constantine, Finkelstein, & Hurd, 2009).

The third approach is concerned with identifying the parts of students' communities that have an impact on their development of college readiness, and it starts with a recognition that there are forms of community cultural capital that may contribute to students' college readiness. This subset of the literature suggests what those capitals are (Yosso, 2005). It also seeks to know how those capitals may translate into student college readiness (Nuñez, 2005; M. M. Williams, 2014). And, its intended contribution is ultimately to recommend how educators can acknowledge and tap into those capitals as sources of college readiness (Longwell-Grice, Adsitt, Mullins, & Serrata, 2016; Welton & Martinez, 2014). Like the other two groups of literature, a subset of this scholarship pays particular attention to first gen students' cultural capital as it relates to their postsecondary experiences and performance (Nuñez & Sansone, 2016; O'Shea, 2016).

Each of the three bodies of research summarized above provides a piece of how we might study and address the problems that first gens disproportionately experience in college. By offering ways to measure college readiness, the first vein of scholarship is useful for examining *if* we are getting first gens where they need to be as college students. By identifying what both educational programs and first gens' own communities can do to develop college readiness, the second and third bodies of research help us understand *how* to get first gen students to where they need to be.

Gaps in the Scholarship Concerned with First Gen College Readiness

Future researchers and practitioners who wish to draw on the existing literature for the purposes just mentioned may have difficulty doing so, however. There are two reasons why.

Minimal Coherence. The three scholarly approaches examine college readiness from different, isolated perspectives that presently rarely work together. To be specific, the first set of scholars attempt to define what college readiness is but not what causes it; while the latter two sets of researchers look at what might cause college readiness but rarely use a consistent definition of the term that would allow for comparisons across studies.

To elaborate, the first set of scholars delineates the skills and forms of knowledge that they argue define college readiness, but they infrequently explore how to develop and encourage such skills and knowledge in students. The latter two sets of researchers could fill this gap because they investigate what effects college readiness. However, it is difficult to make comparisons, both within and across these two arenas of research, because the scholars often

define college readiness (as an outcome) differently from study to study. That is, the second body of researchers variably looks at the ways in which educational programs (a) promote measures of postsecondary success like degree attainment or credit accumulation (Struhl & Vargas, 2012; M. J. Weiss et al., 2015; Zeidenberg, Jenkins, & Calcagno, 2007), (b) encourage engagement in the college environment (Inkelas, Daver, Vogt, & Leonard, 2007; Kemple & Snipes, 2000; Mamiseishvili, 2012), or (c) develop "college readiness" as an abstract concept (Barnett et al., 2012; Warner et al., 2016). Moreover, the scholars that discuss the community influences on students use their own terms to talk about forms of cultural capital such as familial capital or social capital—but not "college readiness"—that students can utilize to be successful in college (Nuñez, 2005; O'Shea, 2016). Both of these sets of scholars rarely state their findings using common terms, such as what specific skills and forms of knowledge are impacted (Byrd & MacDonald, 2005; Hooker & Brand, 2009; Karp et al., 2012; cf. Merç, 2015; Nuñez & Sansone, 2016; Reid & Moore, 2008).

Imprecise Concepts. Those wishing to use the scholarship to help first gens may also struggle to do so because, within each body of research, scholars do not consistently give concrete explanations of the principle concepts that they discuss. Without such clarity, it is difficult for educators and researchers to use those concepts to think about first gen college readiness.

The first body of scholarship does not always clearly define the many different skills and forms of knowledge that it associates with college readiness. Those scholars alternate between (a) offering terse definitions or single examples that only vaguely illustrate those concepts (ACT, 2016; Borsato, Nagaoka, & Foley, 2013; Conley, 2012, 2014; John W. Gardner Center for Youth and Their Communities, 2014; Mishkind, 2014), or (b) offering elaborate definitions or a wide variety of examples that result in a complicated or inconsistent picture of each concept (Common Core State Standards Initiative, 2017; Conley, 2003; Pascarella et al., 2004). By providing either too little or an overwhelming amount of information, the first body of scholarship fails to visualize college readiness in ways that potential users of such information can easily grasp.

The second body of scholarship is beset by similar limitations in that it often describes how educational programs affect college readiness without illustrating the specific steps that programs take. These scholars examine a wide range of educational programs in order to determine which of the features incorporated into those programs may develop student college

readiness (Barnett et al., 2012; Barnett, Fay, Pheatt, & Trimble, 2016; Barnett, Fay, Trimble, & Pheatt, 2013; Barnett, Maclutsky, & Wagonlander, 2015; Barnett & Stamm, 2010; Boroch & Hope, 2009; Bowles & Brand, 2009; Center for Community College Student Engagement, 2013; Hooker & Brand, 2009), and yet that research infrequently describes what those program features look like in practice (cf. Barnett, Bucceri, et al., 2013; Geltner, Wagonlander, & Moore, 2014; Hamedani & Darling-Hammond, 2015; Karp et al., 2012). The second body of scholarship thereby makes it difficult for educators to sort through the many program features discussed in this literature and to envision how to implement the ones that they choose to put into practice.

The third body of scholarship does not consistently give a clear picture of what first gen students' communities do to affect college readiness. A number of these studies identify which parts of first gens' backgrounds and community influence their college experiences, yet those studies often stop short of empirically demonstrating why the students' backgrounds or communities have an impact (Engle & Tinto, 2008; Harrell & Forney, 2003; Inman & Mayes, 1999; Mehta et al., 2011; Peteet, Montgomery, & Weekes, 2015; Pike & Kuh, 2005; Stebleton & Soria, 2012; Terenzini, 1996) (cf. Carpenter & Peña, 2017; Lowery-Hart & Pacheco, 2011; Stephens, Fryberg, et al., 2012; Whitehead & Wright, 2017). A few studies do explicitly illustrate how first gens' backgrounds and community influence their college experiences, but those studies only do so for a handful of factors like family, employment, or students' age or gender identity (Duncheon, 2018; Gist-Mackey, Wiley, & Erba, 2018; Longwell-Grice et al., 2016; Mamiseishvili, 2010; Nuñez, 2005; Nuñez & Sansone, 2016; O'Shea, 2016; W. L. Smith & Zhang, 2010; Sy, Fong, Carter, Boehme, & Alpert, 2012; Vasquez-Salgado, Greenfield, & Burgos-Cienfuegos, 2015; T. R. Wang, 2014) (cf. Yamamura, Martinez, & Saenz, 2010). Thus, the third body of scholarship leaves gaps in our vision of what exactly is taking place when many parts of first gens' lives affect college readiness.

Addressing the Gaps in the Scholarship

Combining the various lines of scholarship and visualizing their supporting concepts would be useful next steps toward devising a framework for examining how first gens become college ready. Namely, such a framework could begin to guide thinking and reasoning about (a) students' college ready skills and knowledge (i.e., using the first line of scholarship) as well as (b) forces in student lives that may develop their skills and knowledge (i.e., using the second and

third lines of scholarship). The benefit would be to give investigators and educators a more coordinated and concrete set of perspectives from which to understand and improve first gen students' development of college readiness.

Purpose and Contributions of the Present Study

The overarching problem that drives this study is that first gens experience less postsecondary academic success and satisfaction than other students, potentially because first gens are not readied for college, retain capabilities that are not recognized as forms of college readiness, or both. The more immediate problems are the absences of coordination and specificity of concepts among and within three key strands of research that have the potential to inform efforts to develop college readiness in first gens. From that follows the need to support educators and researchers by integrating this scholarship and visualizing its core conceptions in ways useful for designing and examining programming for first gen students.

Thus, the purpose of this study is to take steps in this direction by (a) synthesizing this scholarship into an initial framework and (b) putting this framework into dialogue with students' lived experience. The aims are to use the voices of students to (a) demonstrate overlaps and connections between the framework's three approaches to understanding college readiness, and (b) animate and exemplify the core concepts in the framework. The intent is to support as well as add to and refine the framework's fundamental approaches and core concepts.

The contribution to scholars will be directions for new research grounded in a more coordinated and practicable approach to studying how first gens develop and leverage college readiness. The contribution to professional educators will be case-specific insights from students into where on first gens' path to college readiness that practitioners might improve.

Conceptual Foundations for the Framework

The preceding overview of the literature suggests that educators and researchers would benefit from a framework that supports them in thinking and reasoning about students' college readiness along three interdependent dimensions: capacities, context, and community.

- The first dimension, *capacities*, focuses on which specific student skills and knowledge constitute college readiness.
- The second dimension, *context*, focuses on ways in which students' educational programs (e.g., high schools and colleges) support the development of those capacities.
- The third dimension, *community*, focuses on ways that students' families and communities support the development of cultural capital that translates into college ready capacities.

Drawn respectively from the three strands of scholarship discussed above, these dimensions bracket the conversation about first gen students' development of college readiness. Further, scholars in each body of literature delineate student capacities, contextual elements, and community factors that they associate with each dimension. These lists of concepts can guide what researchers and educators might initially pay attention to when exploring each dimension. Below, I briefly describe the three dimensions and the concepts associated with each. These descriptions (i.e., conceptions) of capacities, context, and community constitute an initial schema, or framework, of college readiness on which I reflect in this study.

Capacities

In order to frame our thinking about what college readiness is, I synthesize from the first body of literature a list of student *capacities* that scholars say are signs of readiness, particularly for community college students. I focus on research related to this type of institution because it is part of the setting which my study takes place. These capacities include (a) noncognitive skills through which students take ownership of their learning and implement effective learning techniques, (b) college knowledge that allows students to understand how to access and navigate college, and (c) academic skills and knowledge that enable students to explore subject-specific content (Conley, 2003, 2011; Roderick, Nagaoka, & Coca, 2009). Scholars argue that these types of capacities constitute college readiness because they find evidence showing that students who exhibit the capacities experience success in college. Specifically, researchers link students' use of these types of capacities to students achieving indicators of postsecondary success like college enrollment, a higher GPA, course completion, persistence, degree attainment, as well as academic and social postsecondary integration (Balfanz, DePaoli, Ingram, Bridgeland, & Fox, 2016; Chen & Carroll, 2005; Choy, 2001; Edmunds, Unlu, et al., 2017; Karp et al., 2011; Kitsantas et al., 2008; Mamiseishvili, 2010; Mokher et al., 2018; Nagaoka et al., 2009; Nakajima et al., 2012; Pascarella et al., 2004; Plank & Jordan, 2001; J. S. Smith & Wertlieb, 2005; Somers et al., 2004; Trockel et al., 2000; C.-C. D. Wang & Castaneda-Sound, 2008). [1] In the next

[1] Enrollment equates to a student accepting an offer to attend, full or part time, at a two- or four-year postsecondary institution (Choy, 2001; Nagaoka et al., 2009; Somers et al., 2004). The literature often measures academic performance using a student's postsecondary grade point average (GPA) (Próspero & Vohra-Gupta, 2007; J. S. Smith & Wertlieb, 2005), yet it also considers other indicators of academic performance like withdrawing from or repeating courses (Chen & Carroll, 2005). Persistence is the condition in which a student remains enrolled in a postsecondary institution or has attained a degree or certificate within a given timeframe (Chen & Carroll, 2005). Degree attainment occurs when a student earns a professional certificate, associate degree, or bachelors degree (Chen & Carroll, 2005; Edmunds, Unlu, et al., 2017; Warburton et al., 2001). Academic integration is characterized

chapter, I delineate particular capacities that appear in the scholarship, provide ways to identify when students have them, and specify what types of college success they support.

Context

In order to frame our thinking about how *context* develops college readiness, I synthesize from the second body of literature a list of elements incorporated into the design of educational programs that scholars say can ready students for college. These include the parts of secondary and postsecondary programs (or partnerships between them) that offer (a) rigorous, relevant, and student-centered direct instruction and dual enrollment (b) relationships that provide ongoing college advising and foster social-emotional learning, and (c) academic supports and interventions guided by assessments of students' abilities (Boroch & Hope, 2009; Grady, 2016; Hooker & Brand, 2009; Jones, Greenberg, & Crowley, 2015; Kemple & Snipes, 2000; Reid & Moore, 2008; Struhl & Vargas, 2012). Evidence that these contextual elements may affect college readiness exists to the extent that researchers find that students who experience these elements can achieve measures of postsecondary success. Specifically, scholars link the named elements with better rates of high school graduation and college enrollment, higher postsecondary GPAs, and improvement in rates of college persistence and degree attainment (Barnett et al., 2012; Barnett et al., 2016; Engle et al., 2006; Goerge, Cusick, Wasserman, & Gladden, 2007; Hooker & Brand, 2009; Jones et al., 2015; Reid & Moore, 2008; Struhl & Vargas, 2012; M. J. Weiss et al., 2015). In the next chapter, I describe contextual elements identified in the scholarship and specify what types of college success they can each support.

Community

In order to frame our thinking about how *community* develops college readiness, I synthesize from the third body of literature a list of factors in students' outside-of-school lives that scholars say can affect students'—particularly first gens'—readiness for college. These include students' families, networks, jobs, languages, and social and cultural identities (e.g., race, social class) (Coffman, 2011; London, 1989; O'Shea, 2016; Stebleton & Soria, 2012; Yosso, 2005). Scholars see a possible connection between these community factors and the development of college readiness. They determine that the named factors can pass on

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by taking increasing numbers, levels, and types of courses; interacting with faculty or academic advisors; attending career-related lectures; being part of learning communities; or using the library. Social integration is characterized by attending arts, athletic, or club activities; volunteering; going to school assistance centers; or simply going to places or having conversations with friends from school (Mamiseishvili, 2010, 2012; Nuñez et al., 1998; Pascarella et al., 2004; Pike & Kuh, 2005; Stebleton & Soria, 2012).

community cultural capital (i.e., aspirational, linguistic, familial, social, navigational, resistant, and human capital) that students can use to successfully enroll in and persist at college (Gist-Mackey et al., 2018; Mobley & Brawner, 2019; O'Shea, 2016), academically and socially integrate into college (Nuñez, 2005; O'Shea, 2016), and earn a degree (McCarron & Inkelas, 2006; T. R. Wang, 2014). In the next chapter, I describe community factors that are of interest in the scholarship, and I specify what impacts each factor can have on students' college transitions, experiences, and success.

Injecting Scholarship Critical of the Framework

While not a distinct dimension of the framework, I do inject scholarly voices that (a) can be critical of my conceptions of college ready capacities and context and (b) remind me to attend to issues of inequity that first gens can face when accessing, transitioning to, and attending college. In part, these voices argue that college readiness consists not just of a set of capacities. It also includes the ways that marginalized students like first gens must overcome systemic inequities to reach and succeed in college (Castro, 2013; Majors, 2019). These authors further caution that we must be cognizant of the ways in which secondary and postsecondary contexts feed into these systemic inequities. Context can do so by expecting first gens and other marginalized students to supplant their own cultural capital with the context's dominant norms. This process risks that contexts will devalue first gens' community cultural capital and require them to shift time and energy away from educational endeavors: resources students familiar with dominant norms do not have to expend. In the next chapter, I explain how this literature pushes me to look for these and other possible interactions between context and community as they simultaneously influence first gens' college experiences.

Research Questions

I ask the following research questions in order to learn how students experience the framework's three dimensions of college readiness.

1. What behaviors, attitudes, and strategies do the students participating in the study (a) believe are important to put into practice in order to be ready for college and (b) cite as having made a difference in their college success?
2. What elements of the program design in this study do the students indicate affect their development of their practices?

3. What factors in the students' communities do they indicate affect their development of their practices?

Methods

I use the following methods in order to answer my research questions. I conduct an in-depth look at a handful of student experiences (n = 5)—both first gen (n = 3) and non-first gen (n = 2)—that all took place at one Early College Design (ECD): a program starting in the 9th or 10th grade of high school that offers students traditionally underrepresented in college a high school curriculum alongside dual enrollment in a postsecondary coursework. As a model, ECDs hold promise for influencing a students' college readiness (Berger, Turk-Bicakci, Garet, Knudson, & Hoshen, 2014; Ramsey-White, 2012; M. M. Williams, 2014), and the model retains identifiable elements within its program design that may be responsible for doing so (Barnett, Bucceri, et al., 2013; Barnett et al., 2015; Wolk, 2005). The specific ECD in the study is representative of that model (Hammersley & Atkinson, 2007).

The findings from my three research questions, respectively, convey each participant student's story of (1) what she says that college ready capacities looks like for her and how, from her view, (2) the program and (3) her community develop her capacities. I primarily generate my findings from a series of three semi-standardized open-ended interviews in which each of the student participants gives a self report of their college ready capacities and their development (Patton, 2002; Pike & Kuh, 2005). I supplement my understanding of the students and the program itself using interviews with ECD personnel, observations of the program, and a review of program documents (Flanagan, 1954; Hammersley & Atkinson, 2007; Patton, 2002). This additional evidence adds the ECD personnel's accounts of students' developmental experiences and gives me my own understanding of the ECD program beyond what the students report.

When examining the five cases within the case of the single ECD program, I use structured, focused cross-case comparisons in order to coalesce the findings about my participant students (George & Bennett, 2005).[2] As part of those comparisons and in order to focus on this study's target population, I discern in what ways the participating first gen students and non-first gen students do and do not differ in how they (a) conceive of college readiness and (b)

[2] The number of participants, however, prohibits me from definitively explaining *the* combination of mechanisms by which the program promotes a comprehensive range of college ready practices in all of its students, regardless of their backgrounds or unique experiences in the program (George & Bennett, 2005; Pawson & Manzano-Santaella, 2012; Pawson & Tilley, 1997, 2004).

experience its development. I then make sense of those findings through my guiding conceptual framework. I compare what researchers are reporting about college readiness and its development with what the students in the study think and experience.

The results are evidence that I use to both support and revise the framework. In the former scenario, the student stories contribute rich detail to support the theory building started in the extant research. In the latter scenario, the student stories challenge and expand what scholars currently put forth, thereby contributing possible new avenues of study.

Arrangement of the Dissertation Manuscript

In the study that follows, I synthesize the extant scholarship, use the student cases to answer my research questions, and compare both in an effort to cultivate my conceptual framework, which I offer as the primary contribution of the study. Here in Chapter 1, I provide a brief overview of study, including: relevant background; the study's purpose and contributions; my conceptual foundations and research questions; as well as an introduction to the methods that support my study.

In Chapter 2, I will review the literatures related to the definition and measurement of college readiness as well as the scholarship related to the ways that both educational programs and students' communities influence the development of college readiness. In association with this review, I will coalesce the key ideas contained in those literatures into a conceptual framework.

In Chapter 3, I will detail the methods of my study, including descriptions of the context, participants, and my steps for data collection and analysis. As part of my description of participants, I will provide summaries about each of the students.

Across the subsequent three chapters, I will directly answer my research questions by comparing and contrasting the findings from the five cases. In Chapter 4, I will detail which behaviors, attitudes, and strategies (i.e., capacities) students participating in the study believe it is important to put into practice in order to be ready for college. I also will determine what indications participant students give that those capacities could make a difference in their college readiness. In Chapter 5, I will establish which elements of the ECD program design that the students indicate as having an influence on the development of their capacities. In Chapter 6, I will report which factors in the students' communities they say affect their development of their capacities. I also will explore how context and community interact within the students'

narratives. In each of those chapters, I will consider the ways in which the students' stories exemplify, differ from, and add to the respective part of the framework that is relevant to that chapter.

In Chapter 7, I will consider the ways in which I can use what I learn from the students' narratives to support and revise the initial framework as a whole. That discussion will consist of two efforts. First, I will identify and examine the connections within students' stories that capture all three parts of the framework: that is, how both the program design and community affect each particular college-ready behavior or attitude. These connections will demonstrate how the three strands of the framework can be put to work simultaneously when studying first gen college readiness development. Second, I will summarize how the students' narratives exemplify and animate the framework's core concepts. These concrete conceptions may help educators and researchers clearly visualize the student capacities, contextual elements, and community factors that can be a part of first gens' experiences with college readiness. I also will discuss the study's limitations that qualify both of these types of conclusions.

While beyond the immediate scope and purpose of this study, the point of offering, supporting, and revising this study's framework will be to inform the efforts to devise and construct methods for examining the work of developing first gen students' college ready capacities. Thus in Chapter 7, I also will discuss how future researchers might employ the revised framework, as well as what professional educators might learn from the participating students' insights in order to improve their practice.

Chapter 2 – Literature Review

Introduction

For those concerned with readying first gen students to succeed in college, this chapter contains reviews of three extant literatures that can inform how we think about that concern. Namely, those literatures seek to (a) define and measure college readiness, (b) examine how educational programs develop college readiness, and (c) determine how community broadly and first gen status specifically influence college readiness. An initial purpose of this study is to integrate the three literatures into a single framework that (a) incorporates the unique perspective that each body of scholarship brings to understanding college readiness and (b) catalogs the core concepts that each body of scholarship introduces. After reviewing each literature in detail, this chapter concludes with such a framework. It is this framework that I not only use to guide this study but also examine and refine throughout this study.

Literature Review: College Readiness

Three products of the literature about college readiness are that it defines the term, it names and defines the capabilities that some scholars associate with college readiness, and it offers evidence that some of those college ready capabilities help students to succeed in college. In the next two sections, I review the subsets of the literature that (a) seek to define college readiness and the capabilities that comprise it as well as (b) seek to determine ways of measuring college readiness. Collectively, this literature is important to my study because it provides the concepts that I use to identify, demarcate, and categorize what the participants think helps them to be college ready.

Defining College Readiness

Conley (2011) defines college readiness as a student possessing the skills and knowledge that allow her to enroll and succeed without remediation in a postsecondary institution. He adds that college readiness is about preparing students to meet the expectations of college faculty (Conley, 2003).

This definition does not specify what type of postsecondary environment that students are readying themselves for. Some scholarship talks about college readiness as if it is universal to

all postsecondary institutions (Annenberg Institute for School Reform et al., 2014; Borsato et al., 2013; Gurantz & Borsato, 2012). When it is more specific, work like Conley's (2003) and that of others (Pascarella et al., 2004; Reid & Moore, 2008) tends to study student readiness for four-year colleges and universities. However, some scholars do consider what readiness looks like for students enrolling in two-year and community colleges (Byrd & MacDonald, 2005; Deil-Amen, 2011b; Edmunds, Arshavsky, et al., 2017; Karp et al., 2012; Karp & Bork, 2014). Because my study takes place in a community college context, I will highlight this latter subset of the literature.

What is common to all of these subdivisions of the literature is that each thinks of college readiness as being comprised of the capabilities—that is, the skills *and* knowledge—that students need for college. Various scholars (Annenberg Institute for School Reform et al., 2014; Barnett, 2016; Conley, 2014; Mishkind, 2014; Nagaoka & Holsapple, 2017) argue that these capabilities fall into three categories:

- *Academic capabilities*: that is, a student's content knowledge, technical knowledge, and skills specific to various subject areas as well as a student's cross-subject cognitive strategies;
- *Noncognitive capabilities*: that is, a student's learning techniques and capability for taking ownership of her learning; and
- *College knowledge*: that is, a student's understanding of how to access and navigate college.

The literature further divides these noncognitive and college-knowledge categories into sub-categories, delineated respectively under each of those two categories below.

These and other scholars further suggest that each category and sub-category is made up of identifiable capabilities, and the literature defines each individual capability. It frequently does so by example: that is, by naming some of multiple forms that a given capability can take. For instance, students who engage in help seeking, a noncognitive skill, may do so by looking for assistance from college faculty, from college advisors, or from postsecondary support services (Byrd & MacDonald, 2005; Nuñez et al., 1998).

Empirical evidence substantiates, to a degree, the claims that college readiness does likely lead to postsecondary success (Annenberg Institute for School Reform et al., 2014; Conley, 2011, 2014). For instance, some college ready capabilities are positively associated with

students' postsecondary enrollment, academic performance, persistence, and degree attainment (Choy, 2001; J. S. Smith & Wertlieb, 2005; Somers et al., 2004; Warburton et al., 2001).[3]

However, even in cases when scholars corroborate the benefits of certain college ready capabilities, the capabilities that make up college readiness are socially constructed. As a result, the literature is still working to fully define those capabilities (Karp & Bork, 2014). Thus, the college ready capabilities that I find in the literature are less absolutes and more evolving hypotheses about what skills and knowledge benefit students' postsecondary educations.

Academic Capabilities. Academic preparation is one way that scholars think about student readiness for college, and with good reason. According to various longitudinal quantitative studies contrasting postsecondary outcomes for first gen and non-first gen students, first gens who develop academic capabilities are more likely to enroll in college (Choy, 2001), to perform well academically (Pascarella et al., 2004), and to persist in their first year of college and beyond (Warburton et al., 2001).

Within the literature that specifically examines readiness for community college, scholars study two capabilities that they equate to a student's academic readiness for college. First, students may need to have foundational *content knowledge* particularly in such subjects as English and math.[4] Having content knowledge in these subjects can determine whether entering community college students are required to take developmental or remedial coursework before being permitted to take credit-bearing courses, which can affect students' costs and success (Deil-Amen, 2011a; Pratt, 2017). For instance, statistical comparisons of Florida student cohorts find that those who meet content knowledge standards, either by testing out of remedial courses or after completing said courses, perform marginally better than students without requisite content knowledge in for-credit community college classes; and the former also are more likely to persist (Mokher et al., 2018). Though through that same data, these authors also find that

[3] Enrollment equates to a student accepting an offer to attend, full or part time, at a two- or four-year postsecondary institution (Choy, 2001; Nagaoka et al., 2009; Somers et al., 2004). The literature often measures academic performance using a student's postsecondary grade point average (GPA) (Próspero & Vohra-Gupta, 2007; J. S. Smith & Wertlieb, 2005), yet it also considers other indicators of academic performance like withdrawing from or repeating courses (Chen & Carroll, 2005). Persistence is the condition in which a student remains enrolled in a postsecondary institution or has attained a degree or certificate within a given timeframe (Chen & Carroll, 2005). Degree attainment occurs when a student earns a professional certificate, associate degree, or bachelors degree (Chen & Carroll, 2005; Edmunds, Unlu, et al., 2017; Warburton et al., 2001).

[4] In addition to English and math, scholars who look at four-year university students further recommend that content knowledge readiness includes the natural sciences, social sciences, second languages, and the arts (Conley, 2011; Mishkind, 2014).

measuring student content knowledge for the purpose of placing students into remediation is more accurate when based upon high school data in addition to placement exams (Leeds & Mokher, 2020).

A second college ready capability that appears in literature specific to community colleges is students having *content-related skills and technical knowledge* related to core subject areas. For instance, surveys of faculty at fifteen North Carolina community colleges reveal that the faculty members gauge the academic readiness of early college students in part based upon those students' college-level reading and writing skills (Edmunds, Arshavsky, et al., 2017). Other examples of content-related skills and technical knowledge important to college readiness may include computation skills in math or lab skills in natural sciences (Common Core State Standards Initiative, 2017; Conley, 2003).

A third type of academic capabilities that students may need includes *cognitive strategies* that they can use to learn content from a variety a subject areas. These cognitive strategies could include problem formulation, researching, critical thinking, problem solving, as well as organizing, interpreting, and analyzing information or ideas (Conley, 2011, 2014). While part of a longitudinal study of undergraduates (rather than community college students), research by Ernest Pascarella and colleagues (Pascarella et al., 2004; Pascarella, Wolniak, Pierson, & Terenzini, 2003) suggests why developing cognitive strategies might be particularly important for first gens. Their work reveals that first gen second- and third-year students score statistically significantly lower than non-first gen students on measures of many of the cognitive strategies listed above.

Noncognitive Capabilities. Nagaoka and Holsapple (2017) broadly define noncognitive capabilities as "the skills, behaviors, strategies, beliefs, [and] attitudes that matter for school performance, but are not core academic skills" (p. 3). Conley (2014) coalesces these capabilities into two sub-categories: taking ownership of one's learning and learning techniques.

Ownership of Learning. The literature identifies four noncognitive capabilities that fall into the category of taking ownership of one's learning. For each, there is empirical evidence that students who put them into practice may be ready to succeed in community colleges.

In a review of the community college literature, Karp (2016) describes the first, the ability to *set and focus on a goal*, as a student "develop[ing] clear and specific goals, plans for achieving those goals, and strategies for addressing obstacles" (p. 36). One example pertinent to

a college setting is a student planning to enroll and complete a postsecondary program that will earn them a certificate or degree (Horn & Weko, 2009). Students who display the capability to set and focus on a goal may exhibit a readiness to succeed at a community college. Students in that type of postsecondary setting who score higher on a scale measuring greater certainty with their career choices are significantly more likely to earn a higher GPA, which is predictive of them then persisting (Nakajima et al., 2012) (cf. Luke, Redekop, & Burgin, 2015).

Community college students might engage in *help seeking* as another way to take ownership of their learning and thereby be college ready. Help seeking can involve looking for assistance from college faculty, from college advisors, or from postsecondary support services (Byrd & MacDonald, 2005; Nuñez et al., 1998). Two studies by Melinda Karp and her colleagues find evidence that help seeking can be a form of community college readiness. Interviews with a large sample of community college faculty and staff (n = 72) as well as students (n = 97) reveal that they see self-advocacy and communicating with instructors as two skills that define the role of community college student (Karp & Bork, 2014). And in a series of interviews with another sample of community college students, those who report feeling integrated into a community college setting, which includes knowing where to find helpful information, are more likely to persist from their first year to their second year than students who do not report feeling integrated (Karp et al., 2011).

Self-efficacy, or a student's belief that he is capable of accomplishing a task under certain conditions (Kitsantas et al., 2008; Saenz et al., 2007), is a third skill that may help students to be confident in taking ownership of their academic and social lives at community colleges. This is because various stakeholders see this capability as a form of community college readiness. Faculty members at fifteen North Carolina community colleges reveal in surveys that prepared students are those who take responsibility for their own work (Edmunds, Arshavsky, et al., 2017). Qualitative data from students reveals that they too see developing a sense of agency as one skill that defines the role of community college student (Karp & Bork, 2014).

Finally, the literature talks about students developing *self-awareness*, which includes being mindful of one's own emotions, beliefs, and how both alter one's perception of one's circumstances (Davis, 2010; Stebleton & Soria, 2012; Tate et al., 2015). Without this capability, community college students may be less ready. In a study of community college students exposed to a college 101 course, those who do not have a self-awareness of which of their

strengths to draw on in challenging situations are less likely to engage helpful skills that they learned in those courses (Karp et al., 2012).

Learning Techniques. Scholars argue that noncognitive capabilities tied to college readiness also include techniques that help students to learn.

One such skill may be *time management*, which involves deciding how to spend one's time (i.e., which courses and other commitments to take on and how long to devote to each) as well as employing the mechanics of making lists, planning, & scheduling (Byrd & MacDonald, 2005; Collier & Morgan, 2008; Hoff Macan, Shahani, Dipboye, & Peek Phillips, 1990). Community college faculty and students name time management as being a college ready capability in a number of studies. Time management is a skill that defines the role of community college student according to interviews with dozens of community college professors and students (Karp & Bork, 2014). In Byrd and MacDonald's (2005) interviews with nontraditional (i.e., over age 25) first gen students who transfer from a community college to a university, the participants also see time management as an important college ready skill. More specifically, community college faculty and students report that managing one's time to be able to attend and take part in class sessions is of further importance to readiness (Edmunds, Arshavsky, et al., 2017; Karp & Bork, 2014).

Another college ready learning technique may be *collaborative learning*. This capability can entail studying with others, peer-to-peer teaching, completing group assignments, functioning as part of a team, or coming to understand oneself or others through interaction (Boroch & Hope, 2009; Nuñez et al., 1998; Pike & Kuh, 2005; Sawyer & Berson, 2004). Student engagement in collaborative learning can be thought of as community college readiness because it can lead to both networks that provide functional advice for navigating a college as well as students feeling connected to a college. In Deil-Amen's (2011b) rich interviews with 125 demographically representative community college students, they report that working with peers in class and on group projects gave them rare opportunities, as commuting students, to bond with classmates and thereby "create a sense of comfort, belonging, and information-sharing," including useful information about careers and related course pathways (p. 83). Thus it is unsurprising that community college faculty say that students who are well prepared are those who take part in group projects or study groups (Edmunds, Arshavsky, et al., 2017).

A final college ready noncognitive learning technique may be *independent learning*. Independent learning can take many forms: critically reading (i.e., not just taking in content); note taking; memorization and recall; managing one's progress while studying; using technology or libraries to study; and being willing to try and put in the work without relying on prompts from teachers (Davis, 2010; Pascarella et al., 2003; Pike & Kuh, 2005; Reid & Moore, 2008; Stebleton & Soria, 2012). While not found in my review of the community college literature, independent learning may be a form of college readiness that, when missing, can hurt first gens. In interviews with a small sample (n = 13) of first gens who all attended the same high school before moving on to college, they lament having "not been challenged enough in high school" to develop effective individual study habits. They indicate that made it harder for them to rise to the challenge of college work (Reid & Moore, 2008). The finding that poor study habits can hurt first gens' capacity to meeting collegiate challenges is troubling, especially given that surveys of 58,000 undergraduates find that first gens are statistically significantly more likely than non-first gens to say that their individual study habits are "inadequate" (Stebleton & Soria, 2012).

College Knowledge. Work to develop college readiness with students in Chicago offers that students ready themselves for college, in part, by developing "the knowledge base and contextual skills that enable students to successfully access and navigate college" (Annenberg Institute for School Reform et al., 2014, p. 5). The project's advocates argue that these two sub-categories, accessing and navigating college, capture the knowledge about college that benefits students.

How to Access College. Accessing college may require students to have the capability to *understand the admission process*: that is, know how to take college entrance exams, investigate and apply to colleges, choose which college to attend, and finally make the financial and other arrangements to actually enroll (Chen & Carroll, 2005; Choy, 2001; Falcon, 2015; Michigan College Access Network [MCAN], 2017). A second key capability for accessing college could be *understanding the financial aid process*. Students (and parents) with this capability may have knowledge about: the price of attending college; financial aid options like grants, scholarships, and loans; and the Free Application for Federal Student Aid (FAFSA) (Choy, 2001; Morgan, 2016; Reid & Moore, 2008).

While my review of the community college literature yields no mention of these capabilities as forms of college readiness, knowing how to access college is important in other

contexts. Following the data from the National Educational Longitudinal Study of 1988, Plank and Jordan (2001) find that students' odds of enrolling in a 4-year postsecondary institution are statistically significantly higher than both enrolling in a 2-year college and not enrolling at all when the students get encouragement from parents to take entrance exams, follow through on taking those exams, visit colleges with parents, get guidance from school personnel, or have access to financial aid information sources. (Unfortunately, the authors do not calculate whether those forms of college knowledge improve the odds of students enrolling in a 2-year college versus not enrolling.) Of these types of knowledge, having an understanding of financial aid may be particularly influential for first gens who, based on data from the National Postsecondary Student Aid Survey of 1995–96, are more sensitive to considerations of college cost. That is, in contrast to non-first gens, first gens are significantly more likely to persist as they are awarded more financial aid and significantly less likely to persist as they accumulate college debt (Somers et al., 2004).

How to Navigate a College System. Students likely also need to have knowledge about how to successfully be at college. The literatures labels one such capability as an *understanding of postsecondary norms*, which can entail alignment with faculty expectations or comprehending the bureaucratic systems of postsecondary institutions (Collier & Morgan, 2008; Engle et al., 2006). In terms of meeting expectations, interviews with community college faculty and students find that respecting professors and recognizing that community college is less forgiving than high school are two important ways for students to understand postsecondary norms (Karp & Bork, 2014). In terms of comprehending bureaucratic systems, the same study finds that knowing what digital and physical campus resources are available is another skill that defines the role of community college student. This second subskill may contribute to student readiness because, according to interviews with almost three dozen community college students across six months, more of those who knew where to find helpful information persisted from their first year to their second year, in contrast to less persistence among participants who did not have such knowledge (Karp et al., 2011).[5]

A related capability that might help students to navigate college is *acclimatizing to postsecondary culture*. Broadly, college culture can expect students to have a seriousness of

[5] In 4-year settings, undergraduate students may also demonstrate this capability by acclimatizing to specific postsecondary norms like enrolling full time, living on campus, or working a job less hours (or not at all) while enrolled as a student (Pascarella et al., 2004; Warburton et al., 2001).

purpose, whereby they are motivated to learn and do well (Edmunds, Arshavsky, et al., 2017). In a study of North Carolina early colleges, some of which are affiliated with community colleges, students and school personnel report that students should embody this sense of purpose by learning to "act like" college students (Edmunds, 2012). The culture at postsecondary institutions also can be characterized by regular socialization and an openness to diversity and challenge (Nuñez et al., 1998; Pascarella et al., 2004). According to Karp and Bork's (2014) conversations with a number of students and faculty, such forms of openness are capabilities that they believe characterize the role of community college student.

Measuring College Readiness

As I touch on in the last section, the college readiness literature is further concerned with indicating if the defined student capabilities can in fact be called college ready. Scholars do so in order to ensure that students are developing knowledge and skills that are likely to help them be successful in college. This literature is important to my study because it provides a way to measure if the capabilities that the participant students identify contribute to their postsecondary success and thereby could be associated with college readiness.

Predicting Success and Prompting Intervention with Students. Much of the literature seeks to determine which college readiness measures at the high school level might be predictive of postsecondary success (Bahr, 2016; Balfanz et al., 2016). The logic is that the secondary level measures that predict college success also indirectly indicate when students possess the knowledge and skills needed for college (Balfanz et al., 2016; Conley & Darling-Hammond, 2013). Scholars contend that educators should use those measures to monitor students' progress toward college readiness and to intervene with additional developmental activities when necessary (Barnett, Fay, Trimble, et al., 2013; Gaertner & McClarty, 2015; Jerald, 2006; Pascarella et al., 2004; Pascarella et al., 2003).

Researchers disagree about which measures to use. At the secondary level, some favor measuring academic readiness with high school grades (Bahr, 2016; Balfanz et al., 2016), while others also call for using standards-aligned testing, essay writing, portfolios, as well as projects and performance tasks (Conley & Darling-Hammond, 2013). Evaluating students' noncognitive readiness and college knowledge readiness may require even further measures. Attendance and discipline records as well as engagement in student activities could indicate whether students possess noncognitive skills. Moreover, meeting with advisors about going to college, attending

college prep programs, signing up to take college entrance exams, and completing and submitting college applications could be clear signals that students understand the postsecondary admission process (Gurantz & Borsato, 2012; John W. Gardner Center for Youth and Their Communities, 2014; Reid & Moore, 2008) (cf. Gaertner & McClarty, 2015).

Assessing a student's college readiness may require measures at both the secondary and postsecondary levels (Grady, 2016), and the literature equally varies in how it measures for college readiness at the postsecondary level. Those measures start with enrollment, which equates to a student accepting an offer to attend, full or part time, at a two- or four-year postsecondary institution (Choy, 2001; Nagaoka et al., 2009; Somers et al., 2004). The literature often measures academic performance using a student's postsecondary grade point average (GPA) (Próspero & Vohra-Gupta, 2007; J. S. Smith & Wertlieb, 2005), yet it also considers other indicators of academic performance like withdrawing from or repeating courses, number of remedial courses taken, number of credit hours completed, and number of courses taken in core content areas (Balfanz et al., 2016; Chen & Carroll, 2005; Pascarella et al., 2004; Pascarella et al., 2003). Persistence is another measure, and it is the condition in which a student remains enrolled in a postsecondary institution or has attained a degree or certificate within a given timeframe (Chen & Carroll, 2005). Degree attainment is perhaps the ultimate measure of college readiness, and it occurs when a student earns a professional certificate, associate degree, or bachelors degree (Chen & Carroll, 2005; Edmunds, Unlu, et al., 2017; Warburton et al., 2001).

Identifying College Ready Practice. The scholarship just above predominantly looks at measures of secondary and postsecondary success in order to establish that the student tied to those measures is, on the whole, college ready. Another perhaps complimentary approach to recognizing college readiness is to observe a college ready student (as established by the measures above).

Observing a college ready student fundamentally means taking note of which particular, individual capabilities that a student possesses (Byrd & MacDonald, 2005; Duckworth & Quinn, 2009; Markle, 2013; Pascarella et al., 2004; Pascarella et al., 2003; Stebleton & Soria, 2012; Unrau, Font, & Rawls, 2012). To elaborate, the literature uses surveys, interviews, observations, and other college readiness-specific instruments to pinpoint if a student has developed a given academic skill (e.g., critical thinking), noncognitive skill (e.g., openness to diversity and challenge), or use of college knowledge (e.g., socialization into college norms).

Knowing which particular, individual capabilities that students possess leads naturally into the work of Melinda Karp and her colleagues, who advance this thought. They contend that it may be of further use to measure and specify what it looks like when students *put into practice* each particular college ready capability. The idea is that detailing what college ready capabilities look like in practice may make clear what behaviors, attitudes, and strategies students mobilize in order to master the role of college student (Collier & Morgan, 2008; Davis, 2010; Karp & Bork, 2014). Once it is clearer what specified behaviors, attitudes, and strategies students put into practice, it will be clearer what students should learn and what educational programs should teach in order to achieve college readiness (Karp, 2007, 2012; Karp & Hughes, 2008a).

The literature about college integration and engagement seems to corroborate Karp's logic. It similarly studies the behaviors, attitudes, and strategies that students employ in order to "successfully separate from their home context and become academically and socially integrated into the college setting" (Inkelas et al., 2007, p. 406). For example, a student might academically integrate by taking increasing numbers, levels, and types of courses; interacting with faculty or academic advisors; attending career-related lectures; being part of learning communities; or using the library. She may socially integrate by attending arts, athletic, or club activities; volunteering; going to school assistance centers; or simply going to places or having conversations with friends from school (Mamiseishvili, 2010, 2012; Nuñez et al., 1998; Pascarella et al., 2004; Pike & Kuh, 2005; Stebleton & Soria, 2012).

Literature Review: College Readiness Development at Educational Programs

In the next two sections, I review the literature that seeks to explain how students develop college readiness and how educational programs might affect that development.

How Students May Develop College Readiness

Within the second body of literature, a subset of scholars theorizes about the mechanisms by which students might develop college readiness. Some of these researchers list learning opportunities that might help students to achieve postsecondary success (e.g., Adelman, 2006; Chen & Carroll, 2005). Others describe a number of opportunities that, more specifically, may target students' development of academic knowledge and skills (e.g., Belfield & Crosta, 2012; Conley, 2003), noncognitive skills (e.g., Merç, 2015; Saleh, Lazonder, & De Jong, 2005), and college knowledge (e.g., Boroch & Hope, 2009; Plank & Jordan, 2001). Even though this research is not specific to first gens, it is important because it (a) identifies which learning

opportunities might develop students' college ready capabilities and, in so doing, (b) suggests that educational programs may be a natural setting in which many of those learning opportunities can take place.

I define "develop" as learning that promotes the growth of college ready knowledge and skills and makes them active.[6] Karp (2007) introduces us to two forms of development, which I restate here using the terminology that I have used so far. The first, anticipatory socialization, gets students to *think about* the capabilities that are associated with the role of being a college student. The author notes that this form of development is passive: students are told, observe, and/or reflect on what college students do. The second, role rehearsal, is "learning by *doing*" (emphasis added) in which the student develops capabilities by temporarily acting as if they were in the role of college student and "gauging others' reactions to their attempts to do so" (p. 23).[7]

Rehearsal may be further divisible into two activities (Barnett, 2016). Defining them by example, a student might have an *experience* such as participating in a rigorous high school curriculum, which allows the student to practice numerous college-level academic capabilities. In addition, a student might also work toward and reach an *attainment* such as having good high school attendance, which requires that the student practice noncognitive skills like time management.

I will adopt the term "momentum points" to collectively describe the various forms of development. Leinbach and Jenkins (2008) introduce "momentum points" into the discussion of developing college readiness, and they define them as any form of developmental learning that "can provide 'momentum' that propels students toward the achievement" of both short-term and long-term measurable postsecondary outcomes (i.e. "milestone events") (p. 2).

Barnett (2016) advances the thinking about momentum points in two ways. First, she states that multiple momentum points combine to form "momentum chains" to give students "increased forward motion toward college readiness" (p. 1). Her argument continues that *any given* momentum point might be associated with the development of a *particular* college ready capability. For example, the experience of taking high-level math courses in high school may

[6] Adapted from: Develop. (n.d.). In *Merriam-Webster.com*. Retrieved from http://www.merriam-webster.com/dictionary/develop.

[7] Vargas (2015) similarly argues that, in order for a student to develop the capabilities associated with college readiness, the student must have "a chance, with support, to gain and show college skills [and knowledge] through exposure and rehearsal…" (p. 10). A number of other authors (Bransford, Brown, & Cocking, 1999; Ericsson & Charness, 1994; Kolb, 1984; Lave, 1996) explain how rehearsal, in particular, helps students to learn not only by doing but also by reflecting on what they do.

allow a student to rehearse college ready math skills, while the attainment of completing the Free Application for Federal Student Aid (FAFSA) may expose a student to college knowledge related to how to finance a college education.

The extant research is not always able to fulfill Barnett's ideal because it links a particular momentum point to the development of related capabilities in only slightly more than half of the cases that it describes (e.g., Merç, 2015). In the absence of links to developing students' capabilities, the literature instead describes those momentum points that may be associated with positive postsecondary student outcomes (Leinbach & Jenkins, 2008).

Academic Capabilities. Labeled below in *italics*, the literature associates four momentum points with benefiting postsecondary outcomes like enrollment, GPA, persistence, and degree attainment (Adelman, 2006; Boroch & Hope, 2009; Chen & Carroll, 2005; Warburton et al., 2001). Taking *rigorous high school coursework* is one such experience, which scholars equate with both the number of credits a students takes in core subject areas like English and math and the intensity of such courses (e.g., Advanced Placement (AP) classes) (ACT, 2016; Adelman, 2006). *Taking advanced high school math courses* such as Algebra 2, trigonometry, precalculus, and calculus is a version of the previous experience that is worth singling out for its particularly positive affects on postsecondary success (Choy, 2001). Earning either a *high GPA* or *high standardized test scores* (e.g., SAT or ACT) are two attainments that may be associated with positive college outcomes (Chen & Carroll, 2005; Somers et al., 2004).

These momentum points also may develop students' academic capabilities. Rigorous coursework, including advanced math courses, promote students' thinking skills and key cognitive strategies as well as their content knowledge (Belfield & Crosta, 2012; Conley, 2003, 2011; Neumann, 2014). Students who attain a high GPA also are more likely to have a preference for higher-order cognitive tasks (Pascarella et al., 2004).

Another momentum point that may develop academic capabilities is *challenging oneself academically and intellectually*. Pascarella et al. (2004) define this experience as a student increasing the number of hours that she studies and engaging with non-assigned texts.[8] This momentum point may help students to develop skills like critical thinking, learning for self-understanding, and the preference for higher-order cognitive tasks.

[8] The authors also include achieving better grades as part of the experience of challenging oneself academically and intellectually. As I just mentioned, earning a good GPA is a momentum point onto itself.

Noncognitive Capabilities. The literature delineates four momentum points that it links with indicators of postsecondary success like academic achievement and persistence, yet the scholarship does not offer proof that these momentum points develop noncognitive capabilities. Students may attain postsecondary success when they rehearse the role of college students by *aspiring to earn a postsecondary degree* (Chen & Carroll, 2005; Choy, 2001; Somers et al., 2004), *choosing a major / career* may (Germeijs & Verschueren, 2007; Tracey & Robbins, 2006), participating in *peer teaching* or *cooperative classroom groups* (McMaster & Fuchs, 2002; Saleh et al., 2005; Sawyer & Berson, 2004), or learning to study independent of others' instructions via *learner autonomy training* (Merç, 2015; Nonis & Hudson, 2010). These momentum points might develop noncognitive skills like goal setting, self-awareness, and collaborative and independent learning, but the research does not definitively make those links.

In one case, scholars connect a momentum point to both developing a noncognitive capability and postsecondary success. *Achieving academically* (i.e., doing well in school) might be an attainment that improves a student's sense of self-efficacy, which in turn reciprocally improves subsequent student achievement (Levin, 2012). On the other hand, the literature alludes that *participating in structured internships or apprenticeships* or *regulating study time* (and the surrounding study environment) may help students to rehearse time management (Kitsantas et al., 2008; Nagaoka & Holsapple, 2017). However, the literature does not offer any findings to suggest that these momentum points either develop time management skills or lead to positive college outcomes.

College Knowledge. In contrast to its discussion of momentum points and noncognitive skills, the literature can connect four momentum points with both postsecondary success and directly developing college knowledge. Students may be more likely to enroll in, do academically well at, and complete college when during high school they: *talk with adults* (e.g., parents, counselors) *about the college admission process* (Nagaoka et al., 2009; Plank & Jordan, 2001); navigate the federal student aid system in order to *complete the Free Application for Federal Student Aid, or FAFSA* (Morgan, 2016; Reid & Moore, 2008); *consider postsecondary institutional choices that match their abilities* (e.g., aiming for four-year versus two-year institutions, going on college visits) (Chen & Carroll, 2005; Plank & Jordan, 2001; Rodriguez, 2015); and *access information about postsecondary culture and norms* (e.g., talking with experienced adults or peers, looking at colleges' published materials) (Boroch & Hope, 2009; J.

S. Smith & Wertlieb, 2005; Somers et al., 2004). These momentum points also may respectively develop students' knowledge about the admission process, the cost of college and how to finance it, their available institutional choices, and the culture and norms of college (Boroch & Hope, 2009; Plank & Jordan, 2001).

How Educational Programs May Support Student Development of College Readiness

The preceding scholars associate certain momentum points with students' later postsecondary success or, in some studies, with developing college ready capabilities in students. However, it is hard to imagine students having the opportunities to engage in those momentum points absent a setting that supports such opportunities. As Barnett (2016) argues, high schools and college are natural settings for taking responsibility to "intentially implement" chances for students to experience most if not all of these momentum points. For example, such educational programs may incorporate into their designs opportunities to take rigorous coursework, engage in cooperative peer learning, or talk to knowledgable adults about college admissions or postsecondary norms and culture.

Therefore, many researchers in the second body of scholaship examine educational programs in high schools, postsecondary institutions, or community organizations (or collaborations across these three) and try to identify the ways in which their program designs benefit students as they prepare for and transition to college. This literature is important to my study because it suggests which elements of the designs of these educational programs may support students' development of college readiness. It also recommends the type of educational program that I chose to study, in so much as that program incorporates most of the design elements that researchers associate with college readiness development.

I define "support" as assisting the processes of readying students for college and keeping students' readiness going once they arrive on campus.[9] The literature surveys programs across the secondary and postsecondary levels that seem to engage in support of this nature (Boroch & Hope, 2009; Bowles & Brand, 2009; Hooker & Brand, 2009). Similar to the discussion of momentum points, scholars recognize supportive educational programs as those with possible connections to either postsecondary success (e.g., Choy, 2001; Karp, Calcagno, Hughes, Jeong,

[9] Adapted from: Support. (n.d.). In *Merriam-Webster.com*. Retrieved from http://www.merriam-webster.com/dictionary/support.

& Bailey, 2007) or the development of college ready capabilities (e.g., Karp et al., 2012; Reid & Moore, 2008).[10]

The literature looks for two forms of support that make up the design of an educational program. First, an educational program's design is comprised of its core work: that is, the detailed decisions about what knowledge and skills to teach, how to teach them, to which students, and how to measure if students have learned them (Bryk, Sebring, Allensworth, Luppescu, & Easton, 2010; Elmore, 2000; Peurach & Glazer, 2012). Second, infrastructure like instructors' professional capacity, program leadership, the program learning climate, instructional guidance, and parent and community ties also make up the design of an educational program; and they are important for facilitating a program's core work (Bryk et al., 2010; Peurach & Neumerski, 2015).

By looking at the core work and infrastructures of various programs, the literature identifies—in ways distinguishable from the effects of the overarching program—a dozen design elements that may lead to postsecondary success (Choy, 2001; Grady, 2016; Struhl & Vargas, 2012; M. J. Weiss et al., 2015; Zeidenberg et al., 2007). In a few instances, it presents limited evidence that there are elements that may develop particular college ready capabilities (Barnett et al., 2012; Inkelas et al., 2007; Reid & Moore, 2008).

My review concludes that programs that bridge the years in which students transition from high school to college may exemplify many of the design elements associated with promoting college readiness or success (Barnett et al., 2012; Barnett, Fay, Trimble, et al., 2013; Barnett & Stamm, 2010). One category of transition programs, early college designs (ECDs), seems to represent all of those design elements (Barnett, Bucceri, et al., 2013; Geltner et al., 2014; Wolk, 2005).

Secondary Program Designs. Much of the literature examines the design of programs aimed at serving students at the secondary level. These program designs have seven elements in common (which I name in *italics*).

[10] The motives vary for *why* these programs, particularly at the postsecondary level, concern themselves with college readiness. Some may be concerned with increasing the number of underrepresented students who complete postsecondary degrees (The Executive Office of the President, 2014). Others may be concerned with the rate of attrition among admitted postsecondary students (Hirsch, 2017). Still others may be looking for ways to build "pipelines" for admitting and retaining (again, particularly underrepresented) students for specific institutions, academic programs, or professions (Ross, Yates, Derck, Finks, & Sandhu, 2016; Smedley, Stith, Colburn, & Evans, 2001).

To start, multiple scholars talk about the new three R's that characterize many program designs, finding that these three R's may promote student success (Choy, 2001; Goerge et al., 2007; Kemple & Snipes, 2000; Reid & Moore, 2008). The first, *rigor*, refers to a program offering a core curriculum that requires students to complete a certain number of English, math, social science, laboratory science, world language, and visual/performing arts courses, along with advanced courses in math and science (Boroch & Hope, 2009). The second, *relevance*, is defined as learning that connects to student interests and goals by tying academic endeavors to real-world, or "contextualized," scenarios and applications (Warner et al., 2016). The third, *relationships*, occurs when educational programs either connect students with "caring, competent adults and supportive peer networks" or make connections between the educational program and "students' families and caregivers" (Hooker & Brand, 2009, pp. 28-29).

Beyond the three R's, the literature finds four additional program design elements. The first two are being *student centered* and attending to students' *social-emotional learning*. The former broadly describes educational programs that look at students holistically: giving them a voice in the program, being aware of students' cultures and communities, and servicing their emotional and physical health (Hooker & Brand, 2009). In the latter case, a program focuses more narrowly on "prepar[ing] students to be socially aware, skilled, and responsible, and [on] provid[ing] students with the psychological and academic resources they need to belong and succeed in school" (Hamedani & Darling-Hammond, 2015, p. 1).[11]

Another design element common to college readiness-focused secondary programs is the integration of *advising related to college knowledge*. College advising involves both counselors and teachers helping students to learn how to apply to college, navigate admission requirements, take college placement tests, make choices between postsecondary institutions, and finance their attendance. Advising of this nature is associated with increasing the odds that a high school student will enroll in college (Boroch & Hope, 2009; Hooker & Brand, 2009).

The final secondary-level design element is relatively broad because it describes when programs provide *direct instruction* to students about a college ready capability (Reid & Moore, 2008). Because this design element incorporates many forms of core work, scholars cannot

[11] I found no research specific to the impact of program designs that are student-centered or that attend to social-emotional skills. However, students who are capable of being cooperative, being helpful, and understanding their feelings are more likely to graduate from high school and to complete a college degree, and they are less likely to need special education services or to repeat a grade level in school (Jones et al., 2015).

examine it for its specific effects. Rather, they can only generally suggest that college ready capabilities "can be taught through purposive interventions" (Levin, 2012, p. 8).

Postsecondary Program Designs. There are programs situated in colleges that appear to benefit students' postsecondary outcomes (Engle & Tinto, 2008; M. J. Weiss et al., 2015; Zeidenberg et al., 2007). For instance, these programs include Student Support Services (SSS), a federal TRIO program, and first-year experience programs such as orientation programs, bridge programs offered in the summer preceding the first regular fall term, student success courses, and learning communities (Boroch & Hope, 2009; Engle et al., 2006). The literature may be right to investigate these programs because they might support the ongoing development of students' capabilities (Center for Community College Student Engagement, 2013; Inkelas et al., 2007; Karp et al., 2012).

By studying these programs, the literature extracts two additional promising design elements. The first I call *academic supports*, and it includes services like instruction in basic academic skills, tutoring, academic advising, and summer school. The second, which I call *ongoing advising*, includes mentoring, course selection and registration assistance, social enrichment activities, as well as financial aid, career and transfer counseling (Boroch & Hope, 2009; Engle et al., 2006).

Transition Program Designs. The literature notes three final design elements common to programs that fit the label of transition programs. Vargas (2015) begins to define transition programs as those operating in "a shared transition zone where high schools and colleges take joint responsibility for [the] college and career readiness of students in grades 12 and 13" (p. 2). In other words, these programs bridge the final years of high school and first years of college with supports that aid students' ongoing growth of the capabilities that make the transition more successful.

Scholars are interested in the design elements of transition programs because they seem to positively affect high school graduation, college enrollment and degree completion rates, as well as students' academic performance at both the high school and college levels (An, 2013; Boroch & Hope, 2009; Grady, 2016; Karp et al., 2007; Speroni, 2011, 2012) (cf. Barnett et al., 2016). The first design element that characterizes these programs is a *joint secondary-postsecondary partnership*. For instance, the Gaining Early Awareness and Readiness for Undergraduate Programs (GEAR UP) exist as partnerships between local school districts,

colleges, and at least two other community organizations or businesses (Hooker & Brand, 2009). Research related to other similar partnerships finds some, but limited, evidence that these partnerships foster students' college ready academic skills and college knowledge (Barnett et al., 2012).

Another type of program, transition courses, demonstrates how transition program designs sometimes include the elements of *early assessment and intervention*. Transition courses, which include full courses, learning modules, or online tutorials, are for high school students who at risk of being placed into remedial college mathematics, reading, or writing, according to early assessments of their related capabilities (Barnett, Fay, Bork, & Weiss, 2013).

Finally, *dual enrollment* can be either a design element or a type of transition program onto itself. Barnett and Stamm (2010) define dual enrollment as the opportunity for high school students to enroll in credit-bearing college courses. Dual enrollment courses may take place in a high school, on a college campus, or online, and either college faculty or high school teachers with adjunct status at a college can teach these courses. As with transition courses, dual enrollment and secondary-postsecondary partnerships seem to occur as joint design elements in a number of programs (Boroch & Hope, 2009).

Early College Designs. One type of transition program is an early college design (ECD). An ECD is a program starting in the 9th or 10th grade of high school that offers students traditionally underrepresented in college a high school curriculum, dual enrollment, and developmental activities related to academic capabilities, noncognitive skills and college knowledge. The objective of an ECD is to ready students to engage in college-level learning. Students in an ECD are able to earn, often at no cost to them or their families, postsecondary credits or even professional certificates or associate degrees before they graduate from the program in the "13th" year (Barnett, Bucceri, et al., 2013; Barnett et al., 2015; Berger, 2007; Jobs for the Future, 2017; Jordan, Cavalluzzo, & Corallo, 2006; Middle College National Consortium, 2017; Venezia & Jaeger, 2013).[12]

ECDs stand out from other transition programs because they demonstrate positive effects on students' postsecondary outcomes and college readiness. For instance, Andrea Berger and colleagues (Berger et al., 2014; Berger et al., 2013) find that students who attend these programs

[12] ECDs come in many forms (Barnett et al., 2015). For my study, I will focus on a common, traditional version of the ECD model advocated by leaders in the ECD field (e.g., Barnett, Bucceri, et al., 2013; Cunningham & Wagonlander, 2000; Geltner et al., 2014).

are statistically significantly more likely than peer groups to graduate from high school, enroll in college, and attain college degrees. Moreover, students who attend ECDs may have strong academic capabilities (Edmunds, 2010; Jennings, Locasio, Buller, & Sartain, 2007; Miller, Fleming, & Reed, 2013; Woodcock & Beal, 2013), strong noncognitive skills (Cerrone, Nicholas, & Ramlo, 2013; Edmunds, 2010; Ramsey-White, 2012; M. M. Williams, 2014), and higher levels of college knowledge as a result of having attended these programs (Jennings et al., 2007; Ramsey-White, 2012; M. M. Williams, 2014; Woodcock & Beal, 2013).

ECDs are interesting not only because they achieve these results but also because they seem to incorporate all of the design elements listed above. For their students who have not yet engaged in postsecondary coursework, ECDs incorporate rigor, relevance, and relationships (Berger, 2007; Jordan et al., 2006; Locke, Stedrak, & Eadens, 2014; Miller et al., 2013; Wechsler, 2001). ECDs tend to be student centered, in part by attending to students' social-emotional learning and wellbeing (Barnett, Bucceri, et al., 2013; Rosenbaum & Becker, 2011; Wechsler, 2001; Wolk, 2005). ECDs also incorporate advising structures that not only support students' development of college knowledge but also bolster other design features like relationships, student-centeredness, and social-emotional learning (Berger, 2007; Jennings et al., 2007; Jordan et al., 2006; Rosenbaum & Becker, 2011). ECDs further offer direct instruction meant to support students' development of academic capabilities and noncognitive skills (Barnett, Bucceri, et al., 2013; Rosenbaum & Becker, 2011).

For their students that are already engaged in postsecondary coursework, ECDs incorporate academic supports and ongoing advising (Berger, 2007; Berger et al., 2013; Geltner et al., 2014; Jordan et al., 2006). It is expected that ECDs meld secondary and postsecondary design elements because, by definition, they are joint secondary-postsecondary partnerships that allow students to dual enroll at both levels (Barnett, Bucceri, et al., 2013; Edmunds, Unlu, et al., 2017; Wechsler, 2001; Wolk, 2005). Moreover, ECDs sometimes include early assessment and intervention for students at all levels of the program (Barnett et al., 2015).

Literature Review: First Gen College Readiness

In the next three sections, I briefly review the research that monitors first gen students' performance at postsecondary institutions. I then review the literatures that explain first gen students' college outcomes using two divergent perspectives: one that looks at the ways in which

first gens may be *underprepared* for college, and another that examines the community cultural capital that can help first gens to be *well prepared* for college.

First Gen Students' Postsecondary Outcomes

First generation college students are those whose parents' highest degree earned is a high school diploma (Nuñez et al., 1998).[13] A portion of the literature about first gens tracks how these students fare on measures of postsecondary success. Some first gens struggle to succeed at college, as described in this literature, which is why I design my study to examine the developmental experience of that student population.

Evidence reveals that first gens are sometimes less successful than non-first gens across a number of measures of postsecondary achievement, even after considering the other characteristics that make up their demographic and academic backgrounds (Chen & Carroll, 2005; Nuñez et al., 1998). First gens are less likely than their non-first gen peers to earn a postsecondary degree (Choy, 2001). Along the path to a degree, they are more likely to take remedial coursework, they tend to have lower GPAs, and they more often drop out of individual courses or college itself (Chen & Carroll, 2005; Warburton et al., 2001). First gens themselves are more likely than their peers to report that they feel both ill prepared for college and afraid that they will fail (Bui, 2002).

Scholars make similar findings among first gens at "less-selective" 2-year institutions, community colleges, or private, for-profit institutions, which first gens are more likely to attend. First gens at those institutions have higher attrition rates and may have lower GPAs than their peers (Engle & Tinto, 2008; Inman & Mayes, 1999; Pascarella et al., 2003). The fact that first gen struggles extend to the 2-year and community college environment is pertinent to my study because, as an ECD, my study site offers the participant students a postsecondary experience in a community college (as I discuss again in the next chapter).

As I allude in Chapter 1, scholars see a potential link between first gens' levels of college readiness and their postsecondary performance (Mehta et al., 2011; Reid & Moore, 2008; Stebleton & Soria, 2012; Warburton et al., 2001). However, there are two competing perspectives on why and how first gen students' college readiness may affect their postsecondary performance.

[13] The students' parents may have had some postsecondary experience but will not have a degree of any sort (i.e., Associate's, Bachelors, or higher) (cf. Choy, 2001; Pascarella et al., 2004; Pascarella et al., 2003; Warburton et al., 2001).

Studying First Gens' Preparedness for College

When trying to explain why first gens disproportionately struggle in college, some scholars propose a simple logic: first gens' communities and prior educations simply do not prepare them with the skills and knowledge they need to be college ready.

These scholars see the parents of first gens as one problem. They contend that, by virtue of having less experience with college, some parents of first gens may have less of an understanding of the normative forms of capital that will help their children reach and succeed at college (Falcon, 2015). For instance, in focus groups with first gens at various two- and four-year institutions, most of them indicate that their parents' "lack of 'college knowledge'" prevents them from helping their children understand and navigate the college admissions process (Engle et al., 2006). Harrell and Forney (2003) similarly conclude based upon their read of the literature and analysis of longitudinal data from the National Center for Educational Statistics that first gens parents are less engaged in helping their children understand what it costs to go to college and how to finance that cost.

By this logic, first gens therefore may be more dependent upon their high schools to ready them for college. However, research finds that the high schools that some first gens attend may at best have a questionable track record of readying them with the academic, noncognitive, and college-knowledge-related capital needed for postsecondary success. Comparisons of first gens and non-first gens based on 35 years worth of survey data collected from first-year students reveal that, year after year, non-first gens self report having higher academic grade point averages than first gens (Saenz et al., 2007). In particular, first gens who also come from low-income families are more likely than non-first gen, higher-income peers to have academic preparation levels that necessitate they take remedial courses in college, according to analyses of U.S. Department of Education datasets (Engle & Tinto, 2008), which is problematic given the fact that first gens are statistically significantly more likely than their non-first gen peers to be members of low-income families (Inman & Mayes, 1999). Through conversations and questionnaires administered to thirteen first gen, urban college students, Reid and Moore's (2008) participants indicate that their prior high school does not challenge them enough for them to develop effective study habits and time management skills. In separate interviews with eight first gen undergraduates, all of the participants report that neither their families nor their high

school counselors provide "sufficient guidance" to help them know how to navigate college systems (Byrd & MacDonald, 2005).

As a result, postsecondary institutions instead can see readying first gens for college as a matter of *the students* developing the capabilities that reflect the normative forms of capital that are valued in college (Davis, 2010). In order to aid this effort, there is extensive scholarship that determines which of the capabilities valued in college environments that first gens are said to lack or have a diminished capacity with. The remainder of this section recalls that research.

Academic Capabilities. Scholars find that first gens and their families recognize the importance of earning a postsecondary degree (Nuñez & Sansone, 2016; Tate et al., 2015). For instance, Coffman (2011) interviews first gen undergraduates and graduate students who indicate that their families encourage them to get a college education as a path to better jobs and lives.[14] However, even when the adults in first gens' lives are eager for them to go to college, some scholars raise the possibility that those adults may not always know how to help first gens get to college (Davis, 2010; Falcon, 2015). As an example, Choy's (2001) statistical analysis of data from three nationally representative longitudinal studies conducted by the National Center for Education Statistics determines that the parents of first gens are less likely to encourage their children to take Algebra in eighth grade and to be involved in guiding their children's high school curriculum, which are important because Choy also finds that academic qualification and higher level math course taking in high school (with starts with taking Algebra in middle school) are associated with whether students enroll in college.

Further scholarship determines that one potential consequence is that some first gens may be academically less well prepared for college than non-first gens. First gens report that they do not possess the *content knowledge* that college-level work demands, such as vocabulary that aids reading (Byrd & MacDonald, 2005) or math and science knowledge (Reid & Moore, 2008). This may be because, according to statistical comparisons of first gens and non-first gens' academic preparation, first gens are less likely to experience challenging coursework in high school like calculus (Warburton et al., 2001). Based on self reports and testing, first gens also are more likely to possess weak *content-related skills* in English (particularly writing), math, and

[14] Coffman (2011) also notes that not all first gens' families are as supportive of their pursuit of a college degree, particularly when families view going to college as being counter to the social norms in their family or community. Other research find first gens to be statistically significantly less likely to show an interest in earning an advanced degree in comparison to non-first gen peers (Pascarella et al., 2004).

science (Pascarella et al., 2004; Pascarella et al., 2003; Saenz et al., 2007; Stebleton & Soria, 2012). First gens' capabilities with *cognitive strategies* are mixed. For instance, when contrasting survey data capturing first gens' and non-first gens' academic development during college, first gens report fewer gains in their communication skills compared to non-first gens (Pike & Kuh, 2005). However, when statistically measuring for the effects of generational status (i.e., first gen vs. non-first gen) on longitudinal data about students' postsecondary outcomes and experiences, first gens display a statistically greater preference for academic tasks that require them to collect and analyze information or ideas (Pascarella et al., 2004; Pascarella et al., 2003).

Noncognitive Capabilities. Numerous studies determine that first gens demonstrate an aptitude for *taking ownership of their learning* when it comes to *setting and focusing on goals*. For example, Inman and Mayes (1999) find that, between first gens and non-first gens at community colleges, the former can be more likely to persist "until reaching their goal" (e.g., earning a two-year degree; p. 15). This may be because first gens can be driven to finish college. In interviews with fifteen first gens at a large, public, flagship university in the southeast, the participants indicate that they are motivated to complete college as a way to start or improve their careers, or as a way to improve their financial well being (Tate et al., 2015). Other, particularly older first gens report that, by setting their sights on and going to college, going to college becomes a more frequent part of their conversations with their own children (Byrd & MacDonald, 2005; O'Shea, 2016).

Additionally, some members of this population draw strength from *self-awareness* of their experiential capital. Specifically, older first gens report that what they have learned from their work experience benefits their college success (Byrd & MacDonald, 2005; O'Shea, 2016). More broadly, first gens report that work experiences help expose them to new professional fields, as well as develop stronger *study skills*, *time management*, and teaching, reading, and writing skills (Nuñez & Sansone, 2016).[15]

Despite the potential noncognitive strengths first gens may bring with them to college, research about their postsecondary experiences seems to focus more on the ways in which first gens may be less able to take ownership of their learning. For instance, through statistical

[15] The benefit to first gens of working while in college tends to be limited to those who work part time and who see their primary role as that of a college students, as opposed to being an employee (Mamiseishvili, 2010). First gen students who work full time while in college are less likely to persist (Somers et al., 2004). First gens are more likely to work during college than their peers and to do so full time (Martinez, Sher, Krull, & Wood, 2009; Warburton et al., 2001).

comparisons of longitudinal data capturing first gens' and non-first gens' postsecondary outcomes and experiences, Nuñez et al. (1998) find numerous signs that first gens can be significantly less likely than their non-first gen peers to engage in *help seeking*: that is, to talk over academic matters with faculty (including going to office hours), participate in class, have contact with faculty outside of class, or go to college assistance centers.

Scholars also show that first gens can have relatively low perceptions of themselves. To start, MANOVA comparisons of first gens and non-first gens scores on scales measuring *self-efficacy*, first gens have significantly lower scores for academic and social self-efficacy (C.-C. D. Wang & Castaneda-Sound, 2008). Across multiple cohorts across the decades, fewer first gens than non-first-gens rate themselves as having "above average" leadership capabilities (Saenz et al., 2007). Other research points out that first gens' negative emotions (e.g., depression, stress) may impede their academic success and negatively affect their physical wellbeing statistically significantly more often than these emotions do for non-first gens (Stebleton & Soria, 2012; C.-C. D. Wang & Castaneda-Sound, 2008).

First gens also may be less likely than their peers to demonstrate *self-awareness*. For instance, first gens are significantly less likely than non-first gens to indicate that it its important use one's education to learn more about one's self (Pascarella et al., 2004; Pascarella et al., 2003).

In addition to studying first gens' capabilities to take ownership of their learning, research also looks at how first gens' proficiency with the learning techniques that can help them. To start, some first gens find *time management* to be difficult. In focus groups, interviews, and surveys, they report being underprepared to manage a college course load and their study time (Collier & Morgan, 2008; Pascarella et al., 2003), particularly in relation to other obligations like work and family (Byrd & MacDonald, 2005). The dozen or so first gens who converse with Reid and Moore (2008) also report that they have trouble using a planner, working without external reminders, or studying over time rather than cramming.

Finally, scholars note that first gens may not always effectively learn in the ways that occur at college. To start, first gens are less likely than non-first gens to report engaging in *collaborative learning* (Pike & Kuh, 2005), which is corroborated by the determination that first gens are significantly less likely than non-first gens to study with peers (Nuñez et al., 1998). There is further concern about first gens' *independent learning* techniques. Stebleton and Soria

(2012) document statistically higher mean responses among first gens (in comparison to non-first gens) when asked if they have "poor study behaviors" like knowing how to start studying, knowing how to get help with studying, and organizing material for use while studying.

College Knowledge. First gens may experience a number of disconnects between their college-knowledge-related capabilities and what is needed or expected.

To start, some first gens (and their parents) may have trouble *understanding the admission process* (Engle et al., 2006). One bit of evidence for this fact is that first gens are significantly less likely to take college entrance exams (Warburton et al., 2001). First gen students (and their parents) also can have a low *understanding of the financial aid process*, which can hinder their ability to matriculate in college (Engle et al., 2006). Specifically, Choy (2001) notes that higher percentages of students whose parents how low levels of education (like first gens) are unable to calculate the price of college. Further, first gens who transfer from a community college to a university report that not knowing about financial aid can inhibit one's ability to access college. The possibility that first gens struggle to understand the financing of college (in contrast to non-first gens) is troublesome given that they are significantly more likely to "worry a lot about financial aid and/or money for school" (Bui, 2002) and are significantly more likely to rely on scholarships, grants and loans (versus parental contributions and savings) to pay for college (Martinez et al., 2009).

Scholars also contend that some first gens can have trouble *understanding postsecondary norms* like the "bureaucratic aspects of academic life" (Engle et al., 2006, p. 17). Specifically, undergraduate first gens (and their professors) report that they see themselves (or their students) struggle to understand faculty expectations to use syllabi, follow grading criteria, and understand the purpose of office hours, which the first gen students further say can negatively affect their performance (Collier & Morgan, 2008).

Similarly, the research points out how first gens can sometimes be less able to *assimilate to postsecondary culture*: that is, the normative culture valued at many colleges. Generally, Bui (2002) finds that first gens can have significantly lower mean scores than non-first gens when responding to questions of whether they feel they know "a lot about the social environment" at their university. More specifically, the first gens in Reid and Moore's (2008) study state that they lack personal exposure to points of view or experiences (e.g., travel) that otherwise could enable them to communicate with classmates and professors. In addition, first gens indicate less

often than their non-first gen peers that they are open both to ideas, beliefs, and values that differ from their own as well as to people from backgrounds that differ from theirs (Pascarella et al., 2004; Pascarella et al., 2003).

A Community Cultural Capital Perspective on First Gen College Readiness

In contrast to the prior scholarly perspective, there is a growing body of literature that is starting to see first gens as possessing forms of cultural capital that they derive from their communities. That capital seemingly should provide first gens with a foundation of capabilities that help them to be college ready. However, barriers remain that stop this from happening, which can explain why first gens still struggle in college. Namely, cultural hegemony can exist at colleges and universities in which White, middle- and upper-class, and non-first gen norms dominate: including norms of college readiness. This cultural hegemony can simultaneously fail to recognize first gens' community cultural capital and instead expect first gens to adjust who they are to fit the dominant culture's standards. That difficult process can have deleterious effects on first gens. Below, I break down the literature's treatment of each stage of this logic.

First Gens' Community Cultural Capital. The scholarship about community cultural capital directly and indirectly follows from Yosso's (2005) work. She argues that marginalization in education occurs when educators only value one set of strengths and norms that are tied to White, middle or upper class values and resources. She further argues that, instead, marginalized populations of students retain community cultural wealth that can benefit their learning. This wealth includes: aspirational capital (i.e., "resiliency" in one's "hopes and dreams"); linguistic capital (i.e., the skills derived from multilingualism); familial capital (i.e., the lessons, support, and "sense of community" derived from kin); social capital (i.e., "networks of people and community resources"); navigational capital (i.e., "maneuvering through social institutions" and systems); and resistant capital (i.e., "oppositional behavior that challenges inequality") (pp. 79-80).[16]

[16] Yosso (2005) replaces the term "community cultural capital" with the term "community cultural wealth." She argues that traditional interpretations of "cultural capital" are grounded in "White, middle class values" (p. 77). "Cultural wealth," in her assessment, instead captures the "assets and resources in the histories and lives of Communities of Color" often used "to survive and resist macro and micro-forms of oppression" (p. 77). While some of the authors that I review in this section take up Yosso's use of the term "cultural wealth" (Duncheon, 2018; Mobley & Brawner, 2019; O'Shea, 2016), others continue to use the term "cultural capital," even though they do so in ways that mirror what Yosso intends when she discusses "wealth" (Nuñez, 2005; Nuñez & Sansone, 2016; Welton & Williams, 2015; Yamamura et al., 2010). I, too, will use the term "community cultural capital" yet equate it with Yosso's (2005) definition of "community cultural wealth."

A number of authors apply Yosso's thinking to first gens, and they affirm that first gens retain community cultural capital that supports their educations. For instance, O'Shea (2016), using in-depth interviews with nearly two dozen Australian university students, finds that first gens come to college with various forms of community cultural capital: aspirations to a postsecondary education, resistance to perceptions based on their economic status or gender, familial support for their postsecondary pursuits, and the lessons of experience (particularly for older first gens). The participants report that these forms of capital motivate and encourage them to pursue and stick with an education. In their conversations with 28 first gens in their first semester at a four-year university, Gist-Mackey et al. (2018) find that familial capital plays a similar role for their participants. The students report that they felt emotionally encouraged by family members who "boast" about their children's college attendance and tell them they are "proud" of them, and the students say they are motivated to get an education in order to financially contribute to their families who were helping to pay for college and to achieve a career that would create financial "upward mobility." Mobley and Brawner (2019), in talking to first gens transferring from community college to 4-year institutions, also note that first gens can draw on familial capital in order to be motivated to go to college. They report seeing college as an "investment" in a viable career that can both help their families' "financially tenuous position[s]" and make them into "a role model" for younger siblings and cousins (p. 357).

These findings parallel results from Ann-Marie Nunez's studies of LatinX first gens at large universities. Her (2005) interviews with first gens determine that their transitions to the academic work of college is aided by maintaining "close and supportive" relationships with family while renegotiating their contributions to their families. The support from family includes emotional capital and social capital, the latter most often learned from older siblings. In another of her studies (Nuñez & Sansone, 2016), students indicate that work experiences cultivate community cultural capitals useful to college going while exposing them to new, rewarding forms of work that a college education enabled. That concept of work provides them a forum and language through which their families could encourage the need for a postsecondary education as step toward "higher status work."

As reflected above, the literature consistently finds family to be a source of community cultural capital as first gens transition to college. T. R. Wang (2014) finds through interviews that this may be the case because family can shape first gens' educations through "memorable

messages," such as: "(a) remembering family, (b) focusing on family, (c) counting on family, (d) not worrying about family, and (e) setting a good example" (p. 276). These messages broadly prompt first gens to remain connected with family while encouraging their pursuit of a postsecondary education.

Beyond being a source of encouragement and motivation, familial capital and other forms of community cultural capital can also help first gens transition to college in practical ways. While not true for all of the undergraduates in Gist-Mackey et al.'s (2018) study, some of their first gen participants report being able to turn to (a) extended family and siblings to learn about choosing and applying to college and (b) parents to help them learn about navigating college finances. In another study Mobley and Brawner (2019), first gens report developing social capital through peers who, like them, also transfer from community colleges and enter the same major, which affords them "instrumental" knowledge about the transfer process. These same students further report that experiential and familial capitals, in the form of their parents' work in "blue-collar or service occupations," inform their decision to study engineering.

Scholars further find that community cultural capital can be a foundation for some of the college ready capabilities that I delineate earlier. For instance, Duncheon (2018) follows a group of "high-achieving," low-income, first gen LatinX youth who move from the same high school into various postsecondary institutions. The students report that their parents impart navigational capital that contributes to their help-seeking behaviors. The students further indicate that they leverage their familial and social capital (in the form of their own cultural heritages) to join the 'conversation' of diverse racial and cultural backgrounds present in postsecondary environments. This reflects a capability to navigate postsecondary norms.

Yamamura et al. (2010) find that entire communities can pass on cultural capital that students can translate into forms of college readiness. In a sweeping case study of business and non-profit leaders, school leaders and teachers, parents, and high school students in the South Texas border region, these stakeholders all talk of a having a collective responsibility to create college readiness for the region's LatinX students. By "sharing their journey as first generation students" (p. 135) adult stakeholders with college degrees model and pass on "diversity navigational capital… such as effective communication styles, relationship building-strategies, and financial management that allow students to be successful in college" (p. 139). Such skills, they state, are important for overcoming "culture shock" when attending college outside of their

home region, where there is "continued struggle for Latina/os in having to cope and adapt to environments where their culture, means of communicating, and ways of knowing are not validated" (p. 140).[17]

A selection of other authors does not explicitly speak about first gens' community cultural capital, yet they too find that first gens draw on community to benefit their educational goals. For example, in individual and focus group interviews, some first gens state that they learn from family to recognize the importance of a postsecondary education as a means by which to secure worthwhile employment and greater financial security for themselves and their families (Coffman, 2011; Tate et al., 2015) (cf. Engle et al., 2006; Falcon, 2015). Further, quantitative comparisons of first gen and non-first gen samples find that familial encouragement has significantly positive affects on first gens' educational aspirations (McCarron & Inkelas, 2006), and familial support significantly reduces stress levels for first gens more so than for non-first gens (C.-C. D. Wang & Castaneda-Sound, 2008).

Though the research above centers on the influence on first gens of family, others argue that a confluence of community factors play a role in first gens' college-going. Coffman (2011), in conversations with first gens, determines that these community factors include first gens' race, familial or personal income level, as well as familial attitudes toward education, work, and "upward social mobility" (p. 87). Orbe (2004), based upon focus-group discussions and in-depth interviews about "what it's like to be a first-generation college student," adds that a student's status as a first gen is more evident to her when it "intersect[s] with other [marginalized] aspects of a person's co-cultural identity" (p. 144).[18] Others contend that first gen status onto itself is also an influence on first gens' college experiences. That is, Carpenter and Peña (2017) talk to first gens at a public, liberal arts Hispanic Serving Institution and determine that the participants could self-author—that is, "establish their own beliefs, values, or knowledge" in order to "orient with the world" (p. 87)—and do so "at earlier stages of life" like others from "underrepresented student populations" (p. 96).

[17] In the next section, I review additional literature that covers concepts very similar to Yamamura et al.'s (2010) idea of culture shock, including how the conflict between marginalized students' cultures and a dominant cultural hegemony at colleges negatively impacts those students' college readiness, experiences, and outcomes.

[18] Orbe (2004) also finds that first gens' status was most evident to them when they were at home, where their matriculation at college afforded them disproportionate attention from others in their families and communities. While first gens do have a "sense of community" among themselves on campus, Orbe writes, that happens infrequently and sometimes needs an outside catalyst to make their statuses evident.

Subordination of First Gens' Community Cultural Capital. Whether onto itself or in combination with others, the preceding scholarship suggests that it is possible that first gens' identities have a role to play in developing their college readiness, particularly by providing forms of community cultural capital on which they can draw. Given this, what then accounts for the perception that first gens are not college ready?

The trouble arises when the normative culture at a given postsecondary institution subordinates and replaces the capitals that first gens possess. To elaborate, educators and parents who are college graduates and from a White, middle class culture sometimes narrow the range of cultural capital that one can use to successfully navigate a student's schooling (Lareau & Horvat, 1999; O'Shea, 2016; Posey, 2012; Yosso, 2005). This includes fostering normative standards of college readiness. By imposing such standards, colleges and universities can exclude the culturally-derived strengths of families and students from marginalized populations, like first gens. This cultural hegemony instead expects first gens to take the challenging step of adjusting to dominant, potentially unfamiliar postsecondary cultural norms.

Cultural Hegemony in Postsecondary Standards of College Readiness. Various scholars critique the conception that college readiness equates to a culturally universal set of skills and capabilities. They argue that this conception is one tool of dominant cultural hegemony at colleges and universities, which assumes that college readiness is an objective benchmark that any student, regardless of background, can attain. They further argue that this conception is false. And yet, the authors lament that postsecondary institutions continue to ask students to meet that conception of college readiness. In so doing, the authors state that colleges and universities are perpetuating cultural disadvantages for some students (like first gens): cultural disadvantages that then beget educational disadvantages.

Majors (2019) editorial, which applies critical race theory to current research about college readiness, makes this argument. She says that current conceptions of college readiness, which put the onus on individual students to put forth the required effort to meet content-based academic benchmarks and develop particular predetermined skills, assume the U.S. is a meritocracy in which "all Americans have equal opportunities for success through hard work" (p. 185). Those perspectives, she continues, ignore the "systematic barriers and disadvantages that people of color face" when trying to meet college readiness benchmarks and skill levels that "are set by the achievements of their White affluent peers who disproportionately attend schools with

an abundance of resources" (p. 185). These barriers can include standardized tests that "advantage[] the cultural frames and knowledge of White youth over non-White youth" (p. 186) or the greater availability of AP courses to Whites in schools serving high-income communities.

Castro (2013) similarly critiques models like David Conley's that measure college readiness only in terms of a set of skills. More comprehensive models, she argues, take into account "the obstacles that chronically underserved students of color disproportionately face in accessing equality of educational opportunity" (p. 300). Any assessment of community college programs meant to address college readiness in marginalized students, she continues, needs to watch out for the presumption that it is the students who inhibit their own college success simply because they lack knowledge and skills. Rather, she argues, programs should critically look for "institutional norms and values" that might inhibit students (p. 302). These institutional factors can include a failure to recognize either past inadequacies in students' schooling or continuing practical barriers that students face (e.g., money, childcare, transportation). These factors also can include ignoring students' own understanding of what their college readiness strengths and needs are. And, these factors can include failing to learn from students how their sense of inclusion in the college environment affects their performance.

A series of research studies published together by Stephens, Fryberg, et al. (2012) provide evidence that colleges and universities retain dominant cultural norms that set standards of college readiness that, in turn, disconnect or "mismatch" with typical first gen norms and forms of cultural capital. The authors use surveys of personnel from 125 "top" and "second-tier" universities and liberal arts colleges to paint a picture of postsecondary culture, compare that to surveys asking over 1,500 students about the social norms they derive from their background cultures, and then conduct quantitative analyses of the full student sample and controlled experiments with 88 first gens to determine how any (mis)match between their cultures and that of their university affects their performance as students. At both tiers of postsecondary institutions, the authors find an emphasis on "the middle class cultural norms of independence… more than norms of interdependence" (pp. 1184, 1186). In contrast, the first gens in the study associate themselves more with norms of interdependence, which the authors define as "connecting to others and being attentive to others' needs" (p. 1180). Further, the degree to which the first gens' norms "matched" or "mismatched" with the norms of their institution

statistically significantly predicted their grades and the experimental groups' performance on English- and math-based measures. As the authors conclude:

> [T]he findings from these studies reveal for the first time that American universities are in fact organized according to middle- and upper-class cultural norms or rules of the game and that these norms do indeed constitute an unseen academic disadvantage for first-generation college students transitioning to university settings. Specifically, the independent cultural norms institutionalized in American university settings can undermine first-generation students' performance because they do not match the relatively interdependent norms to which many first-generation students are regularly exposed in their local working-class contexts prior to college.

A companion work by many of these same authors further finds that this "cultural mismatch" increases clinical signs of stress in first gens (Stephens, Townsend, Markus, & Phillips, 2012).

Devaluing Students' Community Cultural Capital. As just alluded, college readiness standards imbued with dominant cultural norms can negatively affect marginalized students' wellbeing. That may be because such standards can send a message, even if only tacitly, that the cultural capital of students of color, low-income students, or first gens is not valuable.

As an example, low-income, first gen LatinX students report that they felt underprepared for the reading and writing done in their college English classes in part because their peers had content knowledge about art and literature that they did not (Duncheon, 2018). In other words, the academic capabilities that these students perceive as useful in their college classrooms are ones that value someone else's cultural capital and not theirs.

Harper and Newman (2016) see something similar in their interviews of a nationwide sample of high-achieving, "extraordinarily engaged" black, male juniors and seniors, some of who attend predominantly white postsecondary institutions. A portion of those students report that upon entering college they had "a sense of anxiety regarding academic performance and perpetuating racial stereotypes when they were the only minoritized or Black male student in their classes" (p. 15). They, as a result, indicate that they were "academically distracted," withdrawn in class, and less prepared to respond to "stereotypes, microaggressions, and other racialized experiences" (pp. 15-16). Some of those same students also report that the academic effort they put forth in high school allowed them to be the highest achievers, yet a comparable level of effort did not achieve the same success when they were confronted with "the expectations and rigors of college-level work" (p. 12). In both aspects, the students report that their social and academic capital is unequal to the task of transitioning to college.

Prior to even setting foot on campus, marginalized student populations can hear the message that their capital is not valuable for meeting college expectations. Convertino and Graboski-Bauer (2018), in a case study of a single high school principal, finds that the principal is motivated to create a college-going culture at his school in order to correct for deficiencies that he believes the students carry over from their families and community, which are predominantly low-income. The principal judges if students "possess the moral character and ambition" to succeed in college based upon whether they shift their top priority from family needs to school, which in his mind represent students' commitments to achieving the more noble goal of individual economic self-betterment (p. 61). In so doing, the principal "asserts that it is his privilege as a wealthier, better educated administrator to identify, shame, and purge those aspects of family and student behaviors, attitudes, and circumstances that he associates with a culture of poverty" (p. 62). Welton and Williams (2015) observe something similar in their case study of high school faculty serving a high "minority," high poverty student population. In that case, the faculty's negative perception of their students, driven by a state designation as a failing school, increasingly leads the teachers to abandon efforts to create a college-going culture in favor of 'correcting' the students' performance on state-mandated tests.

Requiring Students to Master Dominant Forms of Cultural Capital. In instances when high schools and colleges devalue marginalized students' community cultural capital, they essentially demand that those students also master new, hegemonic forms of cultural capital, including the dominant group's expectations of college readiness.

Sometimes when colleges expect first gens to adjust to dominant norms, those students have a hard time mobilizing the 'right' capital merely because they have fewer sources of said capital. For example, in a qualitative study of two community colleges, the institutions expect that by simply offering students services like advising, student success courses, or specialty programs meant to help first gens that students would know to and be able to access those services (Karp, O'Gara, & Hughes, 2008). However, the colleges fail to acknowledge that students need pre-existing capital, such as regular access to campus or social networks with knowledge of college systems, that students who attend part-time, who work, or who are without family supports—like some first gens (Engle & Tinto, 2008)—do not always easily possess. As a result, interviews with those students over time find that those with fewer resources and less

access to college supports indicate that they are progressing toward a degree less often than the students who have those resources and access (Karp et al., 2008).

In effect, collegiate expectations like those in the prior study make assumptions about what forms of capital first gens already possess. Doing so risks ignoring very real structural barriers that some first gens may face in acquiring capital (Majors, 2019). For instance, in a statistical comparison of first gens and non-first gens attending the same university, first gens report receiving significantly less help during the transition to college from parents than do their peers. Specifically, the first gens indicate that their parents less often discuss preparing for college, encourage rigorous work, or assist with school-related and non-academic problems (W. L. Smith & Zhang, 2010) (see also Jenkins, Belanger, Connally, Boals, & Duron, 2013; Sy et al., 2012). These represent missed opportunities for the first gens in these studies to develop familial and navigational forms of capital that their universities might expect them to possess.

At other times, first gens may have a hard time meeting the expectations of colleges because they can be torn between mobilizing the dominant forms of capital demanded or the community cultural capital that they retain. (Lowery-Hart & Pacheco, 2011) document various instances of this struggle through interviews and focus groups with first gens attending a southwest, regional university. To start, participants report wanting to acclimatize to their university's culture, as can expected of college student (Edmunds, 2012), while worrying that doing so means losing both pride in their "noncollegiate roots and culture" (p. 58) and links to their "familial identities" (p. 62) (Lowery-Hart & Pacheco, 2011). Further, the first gen participants know that speaking up and having a voice is valued in academic and social settings (see Karp & Bork, 2014), yet they hesitate to do so because their cultural and experiential references are dissimilar to those of their peers and thus they risk "being entrenched in the 'out group'" (p. 60) if they join the conversation (Lowery-Hart & Pacheco, 2011). Finally, the first gen participants understand the benefits for seeking help, and how that is expected in college (see Karp & Bork, 2014), yet their parents' levels of education leave them with a nagging sense that they are "dumb" (p. 64) and will only have that suspicion confirmed if they seek help from tutors or academic resource centers (Lowery-Hart & Pacheco, 2011).

Deleterious Effects of Cultural Adjustment. As seen above, colleges and universities can present marginalized students with the dual challenges of devaluing their community cultural capital while demanding that they master dominant forms of cultural capital. The considerable

energies that marginalized students expend in meeting these challenges can detract from their capacity to have positive collegiate experiences and outcomes.

The deleterious effects can be seen in many areas of first gens' college lives. In a longitudinal study of 30 first gens, those who have trouble building networks or relationships and resources in college and rely mostly or exclusively on pre-existing high school supports earn lower mean GPAs than those who adapt to their new collegiate cultures (Saunders & Serna, 2004). In a separate comparative study of first gens' "stressors [stemming] from social and cultural transitions" to college (p. 130), the first gen participants report significantly less life satisfaction than their non-first gen peers (Jenkins et al., 2013). Alongside these generally negative effects, two particular challenges stand out in the literature.

Challenges Balancing College with Family. For first gens, one such challenge comes from balancing their roles as student and as family member. In some collegiate cultures, it is expected that students separate from familial duties in order to focus on their studies (Convertino & Graboski-Bauer, 2018; London, 1989). However, researchers find that first gens and their families often strive to maintain close connections even as the students transition to college (Nuñez, 2005, 2009; T. R. Wang, 2014).

This type of struggle takes place in a study in which fourteen first gens at UCLA talk about their own relationships with their families and respond to a hypothetical scenario that raises a conflict between prioritizing collegiate academic achievement versus family obligations (Vasquez-Salgado et al., 2015). In response to the scenario, the participants overwhelmingly (79 percent) chose to prioritize school over family, yet they reveal that that choice—and their real-life relationships with family—raise constant home-school conflicts for them. Collectively, they reveal tensions between doing academic work and attending family events, visit family, and assisting family. These tensions are less present for students who live farther from home, but those first gens instead report other problems like "(a) extreme homesickness and (b) conflicts between allocating money for travel to see family versus educational expenses" (p. 293). Almost all the participants feel such conflicts make it so they (a) are unable to concentrate or study, (b) earn poor grades, and (c) feel stress, guilty, bad, or like they disappointed their family.

The faces, languages, and backgrounds of the students who surround first gens in college also can engender cultural disconnects for first gens. In Duncheon's (2018) study of LatinX first gens, the participants report missing family in part because, at their colleges, there are few other

students with similar backgrounds as their own. This absence is important because, in a study comparing first gens' and non-first gens reports of stress, "parent emotional support negatively predicted stress for first-generation students" (Sy et al., 2012) (p. 392).

The parallel difficulty that first gens may face is that they can feel marginalized from the very community on which they would normally draw for strength. During the transition to college, some first gens undergo a sense of separation from their communities and families (London, 1989). For instance, first-semester first gen students talk about encountering "unsupportive" family members who doubt their ability to succeed in college, discourage them from attending, or downplay the necessity or worth of college education. Such negative interactions raise feelings of "frustration" and "discouragement" for the participants (Gist-Mackey et al., 2018)(p. 62). Once in college, tensions can persist as first gens and their families start to view each other differently. In one case, community college first gens report that going to college creates a sense of "separation" (p. 360) from their families who perceive them as elitist (Mobley & Brawner, 2019). Similarly, Longwell-Grice et al. (2016) talk with graduate-level first gens who report experiencing an "unwanted distance" (p. 36) from family when the first gens try to communicate with family members about passions that excite them while at college. And interviews with other first gens reveal that they sometimes "feel it is necessary to defend their college-student identities from peers and family members" (Whitehead & Wright, 2017) (p. 645).

Feeling Like Cultural "Imposters" and "Outsiders." As first gens adjust to a college's dominant culture that might devalue their own community cultural capital, another struggle for first gens is trying to decide if they truly 'belong' at college.

For instance, (Peteet et al., 2015) measure feelings of "imposter syndrome" among 161 black or LatinX undergraduates (of which 54% identify as first gens) at a large, Midwestern predominantly white institution. The authors find a significant correlation between first gen status and imposter syndrome, which they define as students believing they have "fooled others into overestimating their intelligence… and [therefore] fear that they will be discovered as a fraud" (p. 176). (Whitehead & Wright, 2017) talk with first gens who similarly express a great deal of uncertainty that "they are pulling off the role of being a college student" (p. 645). In the latter study, one participant notes these feelings came to head when she felt like she was failing to meet her college's expectations. Her education had been financed in part by a scholarship

that, when she received it, described her as "college ready." When her GPA in college dropped below the scholarship's standard and she lost it, she perceived that she was no longer a "valid" college student. In truth, she was still allowed to attend the college. Regardless, her crisis is an example of how first gens' identities as college students can be directly dependent upon meeting expectations they perceive in their collegiate environments.

The difficulties of fitting the dominant culture at college can also leave first gens feeling like "outsiders." (Lanford, 2019) recalls two year-long ethnographic case studies of students who left education as adolescents and returned to college at a nontraditional age.[19] The students demonstrate, through their stories, that they possess such skills as critical thinking, time management, and self-reliance. And yet, they both experience a "crisis of confidence," believing that "they do not have the requisite skills to succeed in [college] coursework" (p. 510). The participants likely report this sense of "outsiderness" because the dominant culture sends them signals that "alienate" them (p. 510). Namely, they find their professors distant and un-relatable, and they experience isolation as older students among younger ones.

Further, first gens who perceive that they do not meet dominant cultural expectations sometimes see it as their own fault. For example, Karp et al. (2008) find that students at one community college fail to access support services provided to them because, in truth, the community college does not make those services easy to access for students who attend part-time, who work, or who have low familial supports. And yet, the students in the study still indicate that it is their own fault that they struggle academically, saying that it is their job to access the services and not the community college's job to make those services more available and more effective. The two students in Landford's (2019) case studies just above similarly accept that they contribute to their own perceived lack of college readiness because they took nontraditional paths. In these studies, the students seemingly internalize the dominant cultural expectations and take a deficit perspective of anything that they do differently from those norms.

The Present Study's Conceptual Framework

Scholars, concerned with the fact that first gen students achieve postsecondary success less often than their non-first gen peers, hope to examine and explicate programming that can ready first gens' to have better outcomes and experiences at college, ultimately with the goal of

[19] Lanford (2019) does not explicitly identify his two participants as first gens, but their commentary about their families alludes that their parents do not have postsecondary experience.

helping educators to improve said programming (Byrd & MacDonald, 2005; Engle et al., 2006; Reid & Moore, 2008). Specifically, the three literatures above generate findings that are relevant to defining what it looks like when students are college ready and describing how students develop that readiness. From that work, it is possible to list likely forms and sources of college readiness that may make a difference to first gens. These lists illustrate three dimensions of college readiness:

- The skills and knowledge—or, *capacities*—that, because they are linked to indicators of postsecondary success, begin to define college readiness. As categorized in the scholarship (Conley, 2003, 2011; Roderick et al., 2009), these capacities can include:
    - noncognitive skills through which students take ownership of their learning and implement effective learning techniques;
    - college knowledge that allows students to understand how to access and navigate college; and
    - academic skills and knowledge that enable students to explore subject-specific content.
- The elements of a student's educational program—or, *context*—that can affect students' achievement of measures of postsecondary success. Building on the study of various educational models (Boroch & Hope, 2009; Grady, 2016; Hooker & Brand, 2009; Jones et al., 2015; Kemple & Snipes, 2000; Reid & Moore, 2008; Struhl & Vargas, 2012), these contextual elements can include the parts of secondary and postsecondary programs (or partnerships between them) that offer:
    - rigorous, relevant, and student-centered direct instruction and dual enrollment;
    - relationships that provide ongoing college advising and foster social-emotional learning; and
    - academic supports and interventions guided by assessments of students' abilities.
- The factors in students' *communities* that can have an impact upon students'—particularly first gens'—college experiences. These can include students' families, networks, jobs, languages, and social and cultural identities (e.g., race, social class) that pass on community cultural capital (i.e., aspirational, linguistic, familial, social, navigational, resistant, and human capital) that students can use when transitioning to and matriculating at college (Duncheon, 2018; Gist-Mackey et al., 2018; Mobley & Brawner, 2019; Nuñez, 2005, 2009; Nuñez & Sansone, 2016; O'Shea, 2016; Yamamura et al., 2010; Yosso, 2005).

These three dimensions—capacities, context, and community—constitute a schema, or framework, of college readiness.

As I employ this framework, I will remain cognizant that a subset of the literature that I review can be critical of the ways I come at the first two dimensions (Castro, 2013; Majors, 2019). Namely, I synthesize the college readiness literature into an initial conception of capacities with links to readiness in community colleges. And yet, I will cautiously consider that any conception of college readiness may be derived from the dominant culture and thereby risks

devaluing and dismissing students' community cultural capital (Stephens, Fryberg, et al., 2012). Similarly, I synthesize the second body of literature into an initial conception of contextual elements that may develop college readiness. And yet, I will cautiously consider that any action taken by educational programs also runs the risk of mandating students' adherence to dominant cultural norms at the expense of their own community cultural capital (Convertino & Graboski-Bauer, 2018; Karp et al., 2008). Broadly, I will acknowledge any ways this study's *context's* normative college ready *capacities* affect the students' use of their *community* cultural capital. Exercising this caution permits me to initiate a dialogue across the three core dimensions and their underlying literatures, which is a purpose of this study.

Below, I flesh out the framework in three ways. I start by explaining why each dimension can be a useful focus for researchers and educators who want to think and reason about the college readiness of first gen students. I then catalog the core concepts of each dimension that, according to the scholarship, seem important for researchers and educators to pay attention to. I also briefly reiterate what more, beyond what is in the framework, there is to learn about each dimension and its core concepts.

Capacities

The framework's first focus is identifying capacities that can constitute college readiness. Assuming that college readiness drives postsecondary success (Conley, 2003; Gurantz & Borsato, 2012), those concerned with helping first gen students succeed will want to be able to measure if first gens are (or are becoming) college ready. That is because doing so allows educators to anticipate if students are headed for college success and to respond with instruction and resources that address gaps in student learning (Annenberg Institute for School Reform et al., 2014; Conley, 2014). One method of measuring college readiness is to identify if students possess skills and knowledge (i.e., capacities) that help them access college and perform well enough to earn a degree (Conley & Darling-Hammond, 2013; John W. Gardner Center for Youth and Their Communities, 2014).

Table 2.1 contains an initial, but not exhaustive, conception of capacities that can signify if a first gen student is college ready. The first column of the table lists those capacities. The second column contains the identifiers, or descriptors, that scholars use to distinguish and define each capacity in the literature. There is research, often situated in community colleges, that tries to determine what student outcomes might be associated with students possessing each capacity,

and the third column of the table lists those potential outcomes. The fourth column cites the studies that examine the capacities for associations with those outcomes.

Table 2.1

A Conception of Skills and Knowledge Associated with College Readiness

CAPACITIES	IDENTIFIERS	OUTCOMES EXAMINED	SOURCES
Noncognitive			
Ownership of Learning			
Set & Focus on a Goal	Develop clear and specific goals, plans for achieving those goals, and strategies for addressing obstacles	GPA and persistence in college	(Nakajima et al., 2012)
Seek Help	Assistance from faculty, advisors, or support services	Persistence in college	(Karp et al., 2011)
Be Self-Efficacious	Confidence in one's ability to accomplish a task	GPA	(Kitsantas et al., 2008)
Be Self-Aware	Being mindful of one's emotions and beliefs	Student stress and health (and subsequent effect of both on GPA)	(Trockel et al., 2000; C.-C. D. Wang & Castaneda-Sound, 2008)
Learning Techniques			
Manage One's Time	Deciding how to spend one's time and keeping track of one's time	GPA and easing transition from community college to 4-year universities	(Byrd & MacDonald, 2005; Kitsantas et al., 2008)
Learn Collaboratively	Peer studying or doing group assignments	Comfort, belonging, and information sharing	(Deil-Amen, 2011b)
Learn Independently	Ability to focus or effective note taking	Parity between first gens and non-first gens on measures of this capacity	(Stebleton & Soria, 2012)
College Knowledge			
Accessing College			
Understand the Admission Process	Knowing how to apply to college	Chances of college enrollment	(Nagaoka et al., 2009; Plank & Jordan, 2001)
Understand the Financial Aid Process	Knowing about college costs and financial aid	Persistence in college	(Somers et al., 2004)
Navigating College			
Understand postsecondary norms	Matching faculty expectations	Persistence in college	(Karp et al., 2011)
Acclimatize to postsecondary culture	Openness to diversity	GPA	(J. S. Smith & Wertlieb, 2005)

CAPACITIES	IDENTIFIERS	OUTCOMES EXAMINED	SOURCES
Academic			
Have Content Knowledge	Having advanced English and math knowledge	GPA and persistence in college	(Mokher et al., 2018)
Have Content-Related Skills & Technical Knowledge	Reading and writing skills, computation skills, or lab skills	Success with engaging in "increasingly complex" postsecondary study	(Conley, 2003)
Have Cognitive Strategies	Problem formulation & solving, researching, or critical thinking	Parity between first gens and non-first gens on measures of these capacities	(Pascarella et al., 2004)

These capacities, which begin to define college readiness, fall into three categories—noncognitive skills, college knowledge, and academic skills and knowledge—with the first two of these categories each containing two subcategories (Conley, 2003, 2011, 2012, 2014). Within the first category, noncognitive skills such as setting and focusing on a goal, seeking help, and being both self-efficacious and self-aware are ways in which students take ownership of their learning (Byrd & MacDonald, 2005; Karp, 2016; Kitsantas et al., 2008; Stebleton & Soria, 2012). Noncognitive skills also include being able to use learning techniques like managing one's time and studying both collaboratively and independently (Hoff Macan et al., 1990; Pike & Kuh, 2005). College knowledge, the second category of college readiness, includes capacities that students use to access and navigate college. Accessing college means that students understand both the admission and financial aid processes (Michigan College Access Network [MCAN], 2017; Morgan, 2016). Navigating college once students arrive then involves understanding the norms of the environment and acclimatizing to its culture (Collier & Morgan, 2008; Edmunds, Arshavsky, et al., 2017; Pascarella et al., 2004). Academic capacities, which make up the last category, take three forms: having content knowledge in core subject areas, exhibiting skills and technical knowledge associated with those same subjects, and using more general cognitive strategies like problem solving (Conley, 2003, 2011; Deil-Amen, 2011a; Edmunds, Arshavsky, et al., 2017).

This list of capacities is a convincing initial conception of college readiness because researchers connect most of the capacities to benefiting measures of college success. In Table 2.1, researchers link many of the noncognitive skills related to taking ownership of one's learning, the forms of college knowledge that help students navigate college, and academic content knowledge with traditional measures like GPA and persistence (Karp et al., 2011;

Kitsantas et al., 2008; Mokher et al., 2018; Nakajima et al., 2012; J. S. Smith & Wertlieb, 2005; Trockel et al., 2000; C.-C. D. Wang & Castaneda-Sound, 2008). Moreover, having an understanding the admission and financial aid processes improve students' chances of enrolling in and persisting college (Nagaoka et al., 2009; Plank & Jordan, 2001; Somers et al., 2004). In addition, researchers associate learning techniques like time management and collaborative learning as well as content-related academic capacities and technical knowledge with student and faculty reports that transitioning to and succeeding at college get easier with these skills (Byrd & MacDonald, 2005; Conley, 2003; Deil-Amen, 2011b). Finally, paying attention to capacities like independent learning or the various cognitive strategies listed may simply be important because first gens report having these skills less often than do non-first gens (Pascarella et al., 2004; Stebleton & Soria, 2012).

Given that the listed capacities can help students succeed, it is important to identify if students possess them and which ones they possess. This is possible when we can clearly observe those capacities, and the framework contains some initial identifiers for each capacity. For some, they define the capacities with examples, such as going to a writing tutoring center as an example of seeking help or doing a group project as an example of learning collaboratively (Próspero & Vohra-Gupta, 2007; J. D. Williams & Takaku, 2011). Individual examples may only give a narrow interpretation of what a capacity looks like in real life, however. Karp and Bork (2014) offer an alternative, more thorough method for spotting capacities, without losing clarity. Namely, these authors argue that college ready skills and forms of knowledge are observable when we identify and define in sufficient detail and "specificity" the behaviors, attitudes, and strategies through which college students put the capacities into practice (see also Inkelas et al., 2007; Karp, 2007, 2012; Karp & Hughes, 2008a, 2008b; Pascarella et al., 2004; Pike & Kuh, 2005). The problem, Karp and her colleagues argue, is that scholars have only begun to define many college ready capacities in such detail, leaving room to augment and refine the indicators of the capacities in Table 2.1.

Understanding students' capacities is one way of gauging their college readiness, and those listed in Table 2.1 can initially bracket and focus a conversation about what it means for first gens to be college ready. But, this part of the framework is incomplete for at least three reasons. First, there could be more, clearer identifiers for each capacity. Second, there is no examination of how collegiate dominant culture might limit this conception of college readiness.

And third, there is nothing here to determine how first gens develop such college ready capacities. I turn next to one such developmental influence: context.

Context

Since the capacities listed above are some of the ones that college ready first gens may want to master, it is logical for researchers and educators to next want to figure out how first gen students go about learning those capacities. Thus, the framework's second focus is determining how context affects the development of college readiness.

I define context as a student's educational program. This definition is in line with other scholars who similarly chose to study how educational programs ready students for college (Barnett, 2016; Fleischman & Heppen, 2009; Vargas, 2015; Warner et al., 2016). One method for determining how educational programs affect college readiness is identifying the curricular, instructional, and organizational elements of their designs that researchers find have an impact on students' transition to college and their postsecondary outcomes (Boroch & Hope, 2009; Bowles & Brand, 2009; Hooker & Brand, 2009; Karp & Hughes, 2008b). Table 2.2 contains a list of just such contextual elements that can affect students' postsecondary matriculation and success. Table 2.2 follows the same structure as Table 2.1 by listing (a) the contextual elements, (b) how scholars identify each element, (c) the student outcomes researchers look at when studying each element, and (d) the cited studies in which that occurs.

Table 2.2

A Conception of Elements of Educational Programs that Affect College Experiences

CONTEXTUAL ELEMENTS	IDENTIFIERS	OUTCOMES EXAMINED	SOURCES
Secondary			
Rigor	Being in an advanced high school curriculum	GPA, persistence in college, and degree attainment rates	(Choy, 2001; Reid & Moore, 2008)
Relevance	"Real-world" learning connected to student interests and goals	Rate of high school graduation and chances of either failing a course or dropping out in high school	(Goerge et al., 2007; Kemple & Snipes, 2000)
Relationships	Connections to program adults and peers	Chances of college enrollment	(Reid & Moore, 2008)
Student-Centered Programming	Attending to students' voices, cultures, and needs		

CONTEXTUAL ELEMENTS	IDENTIFIERS	OUTCOMES EXAMINED	SOURCES
Social-Emotional Learning	Teaching students to be socially aware and psychologically healthy	Rates of high school graduation and college degree attainment	(Jones et al., 2015)
College Advising	Coaching on the college admission process	Chances of college enrollment	(Boroch & Hope, 2009; Hooker & Brand, 2009)
Direct Instruction	Purposefully teaching college ready skills		
Postsecondary			
Academic Supports	Postsecondary tutoring, advising, and remediation	GPA, persistence in college, and degree attainment rates	(Boroch & Hope, 2009; Engle et al., 2006; Engle & Tinto, 2008)
Ongoing Advising	Postsecondary co-curricular mentoring & learning communities	Academic & social integration into college, credit attainment, and persistence in college	(Inkelas et al., 2007; M. J. Weiss et al., 2015)
Transition			
Secondary-Postsecondary Partnership	Programming offered by a cooperative of K-12 schools, colleges, community organizations, and/or businesses	High school academic performance and chances of college enrollment	(Barnett et al., 2012; Boroch & Hope, 2009)
Assessment and Intervention	Content-specific courses, modules, or online tutorials for students not meeting college standards according to testing	High school academic performance and rates of high school graduation	(Barnett et al., 2016; Grady, 2016)
Dual Enrollment	High school students enrolling in credit-bearing college courses	Rate of high school graduation, chances of college enrollment, college GPA, rate of college remediation, and college degree attainment rate	(An, 2013; Karp et al., 2007; Speroni, 2011, 2012; Struhl & Vargas, 2012)

Educational programs at both the secondary and postsecondary levels, as well as those that bridge the transition between those levels, retain design elements that scholars say affect students' chances of reaching and succeeding in college. Across those types of programs, twelve elements stand out. Seven of those elements are built into secondary programs. These include a *rigorous* curriculum, learning that is *relevant* to student interests and goals, and *relationships* between school personnel, students, and their families (Boroch & Hope, 2009; Hooker & Brand, 2009; Warner et al., 2016). Secondary programs also model being *student centered*, attending to students' *social-emotional learning*, and *advising related to accessing college* (Hamedani & Darling-Hammond, 2015; Hooker & Brand, 2009). Lastly, some secondary programs offer

purposive, *direct instruction* of college ready skills and knowledge (Levin, 2012; Reid & Moore, 2008).

Postsecondary institutions continue helping students meet college-level standards once they enroll, and they do so in two ways. In order to help students perform in the classroom, colleges and universities provide *academic supports* like instruction in basic academic skills, tutoring, academic advising, and summer school. *Ongoing advising* at the postsecondary level helps students beyond the classroom and includes mentoring, course selection and registration assistance, social enrichment activities, as well as financial aid, career and transfer counseling (Boroch & Hope, 2009; Engle et al., 2006).

Across the two levels, transition programs help students prepare for college level expectations using three design elements. In some cases, *secondary-postsecondary partnerships* run transition programs (Barnett et al., 2012). Transition courses, in particular, try to reduce students' need for remedial coursework in college by using a combination of *early assessment and intervention* (Barnett, Fay, Bork, et al., 2013). Transition programs also sometimes give high school students the chance to try out college-level work through dual enrollment (Barnett & Stamm, 2010).

This list likely captures ways in which context helps students to prepare for college because researchers connect many of the listed elements with benefiting measures of students' college success. For instance, relevant learning, relationships, social-emotional learning, college advising, and interventions driven by assessment—particularly within secondary-postsecondary partnerships—seem to help students finish high school and enroll in college (Barnett et al., 2012; Barnett et al., 2016; Goerge et al., 2007; Hooker & Brand, 2009; Jones et al., 2015; Reid & Moore, 2008). There is evidence that students perform better academically in college when they had a rigorous high school education or a chance to dual enroll (Reid & Moore, 2008; Struhl & Vargas, 2012). Once there, students may persist in college and earn degrees at better rates when they experience academic supports and ongoing advising (Engle et al., 2006; M. J. Weiss et al., 2015).

In order to help educators and researchers isolate (and thereby discuss and examine) each of these elements, Table 2.2 contains identifiers that demarcate what each element does or what happens within those parts of an educational program. The identifiers that I list are generalized. That is, for each definition, I attempt to capture the mechanisms that are consistently present

across the multiple forms that any given element can take, as seen in the literature. For example, relevant learning can be work-based, problem-based, project-based, or service-based, and it can exist with or without connections to career-related opportunities like employment, internships, or technical / occupational education courses (Boroch & Hope, 2009; Hooker & Brand, 2009; Warner et al., 2016). Yet, as I indicate in the table, most relevant programming commonly uses "real-world" learning in order to tap into students' interests and to guide their future goals.

These contextual elements in Table 2.2 can initially bound and target an examination of how first gens might succeed in college. However, this conception of context is still incomplete for four reasons. First, while many of the elements are linked to positive postsecondary outcomes, there is little in the framework to connect those elements to students developing particular college ready capacities. Second, the identifiers that I provide for each element still require users of the framework to envision, on their own, what specific steps or activities are instrumental to how each element works in reality. Third, there is no consideration of how the elements might reflect the study context's cultural norms. Fourth, this part of the framework does not consider other potential influences on students' college readiness, like those in their communities.

Community

Given that students spend far less time in educational contexts than outside of them (Bransford et al., 1999), it makes sense to understand how that time away from school influences students' path to college and their experiences once they are there. Thus, the framework's third focus is determining how community affects the development of college readiness.

For the purposes of this study, community exists outside of school and is comprised of (a) persons, institutions, media, languages, and physical conditions with which students interact regularly as well as (b) cultural and social identities with which students identify or that they internalize (Bransford et al., 1999; Orbe, 2004). A method for determining how community affects college readiness is identifying community factors that scholars credit with passing on cultural capital (i.e., "knowledge, skills, abilities and contacts") that can have an impact on students' transitions to college and their postsecondary outcomes (Yosso, 2005, p. 77; see also Mwangi, 2015; Nuñez, 2005; O'Shea, 2016). Table 2.3 contains a list of community factors that can affect students' forms of capital, and the table follows the same format as Tables 2.1 and 2.2.

Table 2.3

A Conception of Students' Community Factors that Affect College Experiences

COMMUNITY FACTORS	IDENTIFIERS	OUTCOMES EXAMINED	SOURCES
Family (*via Aspirational Capital*)	Encouraging hopes and dreams despite the presence of obstacles	Student reports of a desire to enroll in and persist in college	(Gist-Mackey et al., 2018; Mobley & Brawner, 2019; O'Shea, 2016)
Family (*via Familial Capital*)	Offering lessons, support, and sense of connectedness through kinship	Student reports of a motivation to enroll in college and earn a degree	(McCarron & Inkelas, 2006; T. R. Wang, 2014)
		Student reports of increased knowledge related to choosing, applying to, picking a major at, and paying for college	(Gist-Mackey et al., 2018; Mobley & Brawner, 2019)
		Student reports of a desire to persist in college, and student reports of academic and social integration into college	(Nuñez, 2005; O'Shea, 2016)
		Student reports of motivation to use college to secure worthwhile and lucrative employment	(Coffman, 2011; Tate et al., 2015)
		Student reports of college becoming a norm for their own children	(Byrd & MacDonald, 2005; Nuñez, 2005; O'Shea, 2016)
		Reduced stress	(Sy et al., 2012; C.-C. D. Wang & Castaneda-Sound, 2008)
Students' Learned Languages (*via Linguistic Capital*)	Providing opportunities to practice multilingual communication		
Community Networks (*via Social Capital*)	Connecting students to people and community resources	Student reports of academic and social integration into college	(Nuñez, 2005)
		Student reports of increased knowledge about transferring to new college	(Mobley & Brawner, 2019)
		Increased capacity to communicate and build relationships in unfamiliar environments	(Yamamura et al., 2010)

COMMUNITY FACTORS	IDENTIFIERS	OUTCOMES EXAMINED	SOURCES
Employment (*via Navigational Capital*)	Teaching students to maneuver through social institutions and systems	Student reports of a desire to persist in college	(O'Shea, 2016)
Employment (*via Human Capital*)	Creating opportunities to develop job-related skills	Students reports of developing: (a) social, aspirational, navigational, and resistant capital; (b) study skills, time management, self-confidence, and college navigation skills; (c) career focus; and (d) academic and social integration into college	(Byrd & MacDonald, 2005; Nuñez & Sansone, 2016)
Students' Cultural / Social Origins (*via Resistant Capital*)	Modeling or teaching oppositional behavior that challenges inequality	Student reports of a desire to persist in college	(O'Shea, 2016)
		Student reports of being able to engage with persons from diverse backgrounds	(Duncheon, 2018)

Yosso's (2005) and others' discussions of the community cultural capital model suggest which community factors (italicized here) can pass on forms of capital. It is evident, just by how Yosso names them, that students' *families* and the *languages* that they speak transmit familial and linguistic capital, respectively. Yosso's definition of social capital states that it is *networks* of people and institutions that pass it on. The community factors that transmit aspirational, human, navigational, and resistant capital are less confined to a single factor. However, researchers do find instances in which first gen students gain these forms of capital respectively from community factors like: (a) *family* encouragement to attend college and start career (Nuñez, 2005; Yamamura et al., 2010), (b) *employment* that teaches both job skills and skills useful to navigating college (Nuñez & Sansone, 2016), and (c) being from a *cultural or social identity* often marginalized in academic and work settings (e.g., an older female) (Nuñez & Sansone, 2016; O'Shea, 2016). In the second column of Table 2.3, I capture what scholars say that each community factor does to transmit the associated forms of capital, thereby providing broad identifiers for each.

This list likely captures ways in which community affects students' preparation for college because either (a) students report that the listed factors affect their college experiences or

(b) researchers find that the factors affect measures of students' postsecondary success. For instance, some first gen students indicate that family can pass on familial and aspirational capital that reduces their stress (Sy et al., 2012; C.-C. D. Wang & Castaneda-Sound, 2008) and pushes them to go to and stay in college, figure out how to practically make that happen, and use that education as a stepping stone to a good career (Mobley & Brawner, 2019; O'Shea, 2016; Tate et al., 2015; T. R. Wang, 2014). The scholarship also indicates that first gens' community networks and employment can transmit social and human capital that helps them to integrate academically and socially into college (Nuñez, 2005; Nuñez & Sansone, 2016) as well as develop skills related to communicating, building relationships, time management, and studying (Byrd & MacDonald, 2005; Yamamura et al., 2010). Other first gen students indicate that family, employment, and their social and cultural identities pass on aspirational, familial, navigational, and resistant capital that helps them to persist in college (O'Shea, 2016).

We can use the community factors in table 2.3 to initially bracket and guide our examination of how community might ready first gens for college. However, this dimension of the framework, like the others, is not entirely practicable to potential users. Based on the scholarship, I rarely link the community factors to affecting the development of particular college ready capacities. Moreover, the identifiers offered by the scholarship do not contain sufficient detail to explain what exactly takes place when a community factor influences students' college readiness, thereby making it harder for researchers and educators to know it when they see it.

A Reminder to be Mindful of Interactions Across Context and Community

Above, I frame both context and community as influences on students' capacities. However, in line with the distinct literatures that study those influences, I set up my framework to examine context and community separately. Understanding that readying students for college can be a responsibility shared by those in students' schools and in their homes (Yamamura et al., 2010), scholars suggest that context and community jointly affect the development of college readiness. I therefore will remain open to any data indicating that these two dimensions of the framework interact.

In my review of the literature, I capture one conception of how students, particularly marginalized students like first gens, can experience the transition between their communities and their educational contexts. There are scholars who pay attention to (a) whose culture is (and

is not) reflected in the norms of educational contexts and to (b) how the college experiences of students from marginalized communities can be affected dependent upon whether their forms of community cultural capital mesh with their educational context's norms (Castro, 2013; Majors, 2019; Stephens, Fryberg, et al., 2012). I visualize this scholarship in table 2.4. There in its second column, I represent what scholars theorize it can look like for students (and educators) to navigate contextual culture and community culture in relation to each other; and in the third column, I list student outcomes that scholars say can change as students experience such cultural interactions.

Table 2.4

A Conception of How Contextual and Community Cultures Jointly Affect College Experiences

PHENOMENON	IDENTIFIERS	OUTCOMES EXAMINED	SOURCES
Concurrent Presence of Secondary and Postsecondary Cultural Norms and Students' Cultural Norms Derived from Community	Degree to which educational contexts expect that students master prescribed forms of cultural capital (vs. the context being responsive to community culture), and the degree to which students subsequently feel excluded / included and Value that educational contexts place on the community cultural capital of students, and the value students subsequently place on their own cultural capital	Students reports of course grades earned; Students' perceived academic efficacy and engagement	(Harper & Newman, 2016; Lowery-Hart & Pacheco, 2011; Saunders & Serna, 2004; Vasquez-Salgado et al., 2015)
		Student reports of how well they are making progress toward a degree	(Karp et al., 2008)
		Student reports of life satisfaction and clinical signs of stress	(Jenkins et al., 2013; Stephens, Townsend, et al., 2012)
		Students' perceptions of inclusion or exclusion within the context	(Lanford, 2019; Peteet et al., 2015)
		Students' relationships with family and community members	(Gist-Mackey et al., 2018; Longwell-Grice et al., 2016; Whitehead & Wright, 2017)

The scholarship I delineate here maintains that there can be a dominant culture within both postsecondary contexts (Stephens, Fryberg, et al., 2012) and secondary contexts (Convertino & Graboski-Bauer, 2018; Welton & Williams, 2015). Two interactions can occur when students, with their own set of community culture(s), encounter a new contextual culture at college or in other educational programs. Scholars first look at how much responsibility contexts

expect students to take for mastering and mobilizing forms of capital that are common in the dominant culture (Castro, 2013; Convertino & Graboski-Bauer, 2018) *vis-à-vis* how much the context meets students where they are culturally (Gay, 2018; Welton & Martinez, 2014). Second, scholars also consider the ways in which dominant norms can affect which cultural capital is and is not valued as being means to success at college (Majors, 2019; Stephens, Fryberg, et al., 2012).[20]

These two types of interactions between educational contextual cultures and students' community cultures can have implications for students' postsecondary transitions and experiences. The literature identifies some such implications for first gens in particular. For example, dominant cultural expectations that college is a time of separation from family (London, 1989) can be at odds with first gens' close connections with family (T. R. Wang, 2014), which can negatively impact first gens' academic performance (Vasquez-Salgado et al., 2015) while also fostering tensions between first gens and their families (Longwell-Grice et al., 2016; Mobley & Brawner, 2019; Whitehead & Wright, 2017). In other studies, having to fit dominant cultural norms can leave first gens feeling like "outsiders" and "imposters" at college (Lanford, 2019; Peteet et al., 2015). Broadly, such contextual / community tensions that first gens experience while culturally transitioning to college can increase their stress and reduce their feelings of life satisfaction (Jenkins et al., 2013; Stephens, Townsend, et al., 2012).

The preceding scholarship is useful to my study because it reminds me to consider two things. First, it foregrounds issues of inequity that first gens can face when accessing, transitioning to, and attending college. Second, and more broadly, it reminds me that context and community likely do not each affect college-going first gens in a vacuum, but rather simultaneously and in interaction. The degree to which first gens' community cultural capital is valuable within their educational contexts' dominant cultures, and how much first gens must adapt to a new contextual culture or are met where they are culturally, are potential interactions between two dimensions of my framework that I should look out for.

[20] The critical works within this literature are particularly concerned with two things. When studying how much students are expected to adapt to college norms and vice versa, some scholars caution that any presumption that students adjust themselves can ignore "systemic barriers" (Majors, 2019, p. 185) and "obstacles that chronically underserved students of color [and other marginalized students] disproportionately face in accessing equality of educational opportunity" (Castro, 2013, p. 300). These same scholars and others (O'Shea, 2016; Yosso, 2005) are also concerned when value is not ascribed to forms of capital that students from marginalized populations (e.g., students of color, low-income students, and first gen students) derive from their communities.

Conclusion

The purpose of the study is in part to offer the framework explicated here. I visualize that framework in Tables 2.1 – 2.3, which respectively conceive of some capacities as well as some parts of context and community (separately and jointly) that appear relevant to college readiness. Each list can guide how we think and reason about each dimension of college readiness.

Even when condensing the scholarship into these somewhat tidier tables however, it is still challenging for educators and researchers to use the framework to focus on what matters to first gen students as they become college ready. The number of concepts on each list still leaves educators and researchers with a lot of ideas to consider. And, because scholars vary in how they describe each concept, educators and researchers still have to define and interpret many of the framework's ideas themselves, making it hard to identify those concepts in real life. Moreover, the framework as I have presented it is not yet cohesive because, like the scholarship I draw on, I mostly treat each dimension separately. Therefore, even armed with this framework, asking educators and researchers to work from research evidence to advise first gens about college readiness is still no small task. To help them, there is still work that can be done to visualize (a) what each dimension of college readiness can look like in real life and (b) how capacities, context, and community can intersect.

To that end, I next turn my attention to the second part of the purpose, which is to put the framework into dialogue with students' lived experiences. The framework has two functions in that dialogue. To start, I use it to frame my inquiry of the students participating in the study so that I learn about the roles that capacities, context, and community play in their college readiness journeys. As I explain in the next chapter, that means using those dimensions of the framework to focus my research questions (and thereby guide the methods through which I answer those questions). Then, in Chapters 4 – 6, I compare and contrast how the students think about and experience each dimension with the three parallel conceptions (i.e., lists) in the framework. That comparison will be the basis for supporting and revising the framework itself.

Chapter 3 - Methods

Introduction

In this chapter, I explain how I gather and analyze information about students' lived experiences with college readiness that I will, in later chapters, put into dialogue with my study's framework. Because I want to learn about all three dimensions of that framework—capacities, context, and community—the following research questions guide my study:

1. What behaviors, attitudes, and strategies do students participating in the study (a) believe are important to put into practice in order to be ready for college and (b) cite as having made a difference in their college readiness?
2. What elements of the program design in this study do participant students indicate affect their development of their practices?
3. What factors in participant students' communities do they indicate affect their development of their practices?

As I explain below, the study includes methods that enable me to answer these questions, starting with choosing a location where students are likely to be developing college readiness.

Location

There are three reasons why the location of the study is an early college design (ECD). First, ECDs are known to teach college ready capacities (Edmunds, 2010; Jennings et al., 2007; Miller et al., 2013; Woodcock & Beal, 2013), which is the form of college readiness that I ask about in my first research question. Second, an ECD often is a single context that incorporates secondary, postsecondary, and transition design elements (Barnett, Bucceri, et al., 2013; Geltner et al., 2014; Wolk, 2005), which covers the breadth of programmatic elements that I hope to see when asking my second research question. Third, these same scholars indicate that ECDs often enroll populations of students from a number of underserved backgrounds, which suggests that I will find answers to my third research question about community.

Because it checks many of these boxes, I study a common, traditional version of the ECD model that leaders in the ECD field advocate (Barnett, Bucceri, et al., 2013; Cunningham & Wagonlander, 2000; Geltner et al., 2014). I specifically conduct my study at County Early

College (hereinafter "County"), an ECD in a Midwestern U.S. state, because it is an "appropriate" example (Hammersley & Atkinson, 2007, p. 29) of this common ECD model.[21]

In line with the common model, County is a secondary-postsecondary partnership that offers students the opportunity to earn college credits. Like most ECDs (Barnett, Bucceri, et al., 2013), County partners with and is located on the campus of a two-year community college. Students complete County having earned a high school diploma that meets the state standards, in part by taking college preparatory courses taught by County faculty and in part through required and elective community college courses. Through the community college, students also earn postsecondary credits as well as a technical certificate or associate degree in one of over sixty programs. County pays for its students' college tuition and textbooks.

Also in line with the common model, County is a small school that still bridges the transition from high school into college. In 2016-2017, total enrollment at County was over 650 students. The "Middle College" at County enrolls students who, in a traditional educational trajectory, would be in either grades 10-12 of high school or their first year of college. County also offers a 9th-grade academy, and thereby between the two sub-programs it effectively covers all of high school and into the first year of college. Because in most recent years more students apply to County than it can enroll, the program admits students based upon a lottery. Students then need to maintain a minimum GPA of 2.0 in County and community college courses in order to remain in the program.

Further in line with the common model, County serves students underrepresented in higher education. County draws students from throughout the county in which it is located. More than half of County students are female, and nearly ten percent are economically disadvantaged. Over three quarters of County students are white, with the County population also including less than ten percent of each of the following: black students, students of two or more races, Asian students, and Latin@ students. This racial breakdown masks the fact that County services a notable number of Arab Americans as well as many students who either themselves immigrated into the U.S. or are the children of immigrants. The number of first gens at County is unknown, but they are likely present based upon the observations of the program's Dean. The fact that first gens are more likely to have a number of the background characteristics

[21] I de-identify my case site. De-identifying prohibits my reader from mobilizing existing background info that s/he may already possess about County.

present within the student population at County also suggests that they are enrolled in the program (Engle & Tinto, 2008; Saenz et al., 2007).[22]

Additionally, County is my study site because, by many measures, County presents as a highly effective school. The program has received numerous awards for the academic performance of its students, who "are among the very highest achieving high school students in the state." Additionally, County's website reports that: "According to outside research our students pass the vast majority (95%) of the college courses they take, and collectively they maintained a grade point average in college courses last year that was over 3.35." County students also may perform better on the ACT than their peers in the state and nationally.[23]

Participants

Study participants include County students as well as County staff and faculty.

Student Participants

County personnel assisted me to recruit student participants (n = 5). The County Dean and one of the County counselor's provided the names of potential participant students and their email addresses. I reached out to the potential participant students via email, offering a one-on-one informational meeting with me (in-person or via remote conferencing software provided by my university). My first three participant students held this initial meeting during which I oriented them to study and scheduled our first interview. My latter two participants coordinated with me via email, so that our first interview was our first person-to-person conversation. In order to encourage student participation, I offered students ten-dollar gift cards to campus dining as compensation for participating in each interview. In all but one case, the participant students declined to accept that compensation.

All of the students have earned community college credits, meeting one of my selection criteria. Three of the student participants meet my criteria of being a first gen. For the first gen students, the highest level of education attained by either of that student's parents is a high school diploma.

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[22] The state student data site for County provided the verifiable percentages for the breakdown of the program's population. The source for the non-verifiable student background information was County's dean. First gens were more likely than their peers to: (a) be female; (b) come from a minority or marginalized racial background; (c) come from a lower-income family; (d) have a parent or parents born outside the U.S.; (e) be a non-native English speaker; and (f) be employed while in school (Engle & Tinto, 2008; Saenz et al., 2007).

[23] The preceding quotes are variations on text found in materials published by County. I do not cite the precise text or its source as doing so would identify my case site.

In order to describe County, I make cross-case comparisons by thinking of each student participant's individual progression through the County program as its own distinct case. That is, each student's progression serves as a variant of the developmental process at County. Taken together, I use the multiple student cases to describe County as the overarching case. Therefore, I choose to focus *in depth* on the student participants rather than incorporate a breadth of (i.e., more than five) student perspectives (Hammersley & Atkinson, 2007).

In order to introduce each of my participant students, I convey elements of their stories related to all three parts of my guiding framework. Namely, I provide a description of each students' background in order to relate some of the community factors at play. I include some brief commentary about why each student is knowledgeable about college ready capacities. Moreover, I share a short sketch of each student's progression in the program in order to orient the reader to that student's developmental journey in the County context.

Mariama. Mariama is a 17-year-old first gen. She recalls that her parents "don't even have a high school diploma." She is the middle of five children in her family, and her older sister attends a four-year university in the same state where Mariama lives. Mariama is African-American, and she has a part-time job.

Mariama is arguably a good source for understanding college readiness at County because she meets one of the traditional measures of college readiness: persistence in college level coursework.

Mariama is in her 3rd Year in the County Middle College, and she had come into the school at the start of the 1st year of the Middle College program.[24] She had been taking college classes since the winter semester of her 2nd Year. This timeline alludes to the fact that County teachers permitted her to start college courses later than most County students. Mariama relates that her shyness about participating in class and a confrontational communication style prohibited her from earning the soft skill credential that is one of County's two benchmarks for

[24] The ECD most often enrolls students at one of two points. Some students arrive into the 9th grade program, which is an in-house prep year for the full Middle College program. Students coming into the first year of the Middle College would normally be in their 10th-grade year at a traditional high school. Students in the Middle College program often talk about being in their 1st, 2nd, 3rd, etc. year of the program. However, progress in the program is determined by students meeting academic milestones and soft skills credentialing; not by reaching time benchmarks or fulfilling credit hours. Therefore, the years of the Middle College program do not equate to the 10th, 11th, or 12th grade of a traditional high school.

moving students on to college course-taking.[25] When we spoke, she was enrolled in college coursework with a goal of earning a liberal arts associates degree by the following winter term. Upon completion, Mariama then plans to enroll at a four-year university or college with the intent of earning a degree related to social work.

Adbi. Abdi is, at 16 years old, the youngest of the students in the study. Abdi tells me that he is the first of his siblings (unknown number) to attend college. He adds that his mother has no formal schooling, and his father does not live with his family (i.e., Abdi is a first gen). Abdi shares that he, his mother, and his siblings emigrated from Somalia. He strongly identifies as Somali. Abdi also holds a part-time job.

Abdi has demonstrated college readiness from early on in his time at the program. His BASE (Better Accounting of Student Efforts) advisor indicates that Abdi arrived in the program's First Year with "pretty high level" capacities.[26] After only one semester, he qualified for college classes in all subjects except English; and he was cleared for college coursework in all subject areas by the conclusion of his second semester in the program.

When we spoke, Abdi was finishing his 2nd Year. On the one hand, this means he is the youngest of the study participants and closest in time to the point in the program before he started college classes (i.e., the secondary level of the program). This may help him to recall how the early levels of the County program developed his practices. On the other hand, he still has experience with three semesters of college level coursework, and that experience allows him to (a) test and evaluate the college readiness of his capacities as well as (b) understand the effect that the postsecondary level of the program has on his practice development.

Steven. Steven spoke at greatest length about the factors in his community that he believes affect his college readiness development. Steven is African-American, and he is the only participant student to directly comment on his family's income level, which he describes as

[25] County requires its students to consistently demonstrate five noncognitive, or "soft", skills: attendance, preparation, follow-through, communication, and responsibility. County teachers provide formative and summative feedback about students' performance on these metrics. Students who meet County's standards on these measures receive a "soft skill credential." This, and passing the academic courses at County, permits students to enroll in college courses.

[26] All County faculty and counselors served in a second role of BASE (Better Accounting of Student Efforts) advisor. BASE advisors served as the primary liaison and advisor for designated students throughout the program. Specifically, BASE advisors met weekly in a classroom or group setting with advisees in the 9th-grade academic and 1st Year of the Middle College. County students then met with their BASE advisors throughout the remainder of the program. To name just a few parts of the job, BASE advisors helped students pick and sign up for classes (including at the community college), helped design with students their degree or certificate pathway, stayed in communication with parents, and for many students served as a confidant and friend.

"low-income." Steven adds that these demographics also describe the community in which he lives. Steven is a first gen, as his mother finished high school but his father had not. Steven is the oldest of the participant students at 18 years old.

There are two possible reasons why Steven is able to talk about college ready capacities and how to develop such capacities.

On the one hand, he was having success as a college student when we met. He had recently walked at graduation in anticipation of him then later completing just a few courses during the upcoming 4th Year of his program. Doing so would allow him to earn a liberal arts Associate's degree. Steven then plans to transfer his postsecondary coursework to a four-year undergraduate institution.

On the other hand, Steven also arguably knows as much about what constitutes successful college-level practice from having *not* made steady progress in the postsecondary level of the program. He entered County as a 9th grade student, and he started to take college coursework beginning in his 1st Year of the Middle College. Since entering postsecondary coursework, the program had "pulled back" Steven into its own courses on more than one occasion. At County, students who fail college level courses may need to retake County's own courses in that same subject area. Similarly, failing students may also have to retake a County course, such as the Critical Thinking class, in order to re-learn and demonstrate improved soft skills. Steven has engaged in both scenarios during his time at County.

Selma. Selma is a 17-year-old non-first gen. Her father graduated from high school, and her mother has a bachelor's degree from a nearby state university. Selma states that she has at least two younger siblings, both of which experience chronic medical issues. This fact plays a role in her decision to go to medical school (discussed later). Selma alludes that her family heritage is Palestinian, in that she travels to Palestine and Israel (as I discuss in later chapters). Selma also identifies as a Muslim.

In order to understand why Selma is able to talk clearly about her college readiness and how County affects her development, it is helpful to contextualize her as a strong student who takes full advantage of what County offers. Her capability as a student is seen in what she has accomplished, all within what would be the four years that other students spent at a traditional high school. When we spoke, Selma was at the beginning of her third and final year in the Middle College. She had begun in the 9th grade academy portion of the program, and she had

been soft skill credentialed that year: even before beginning the Middle College. In the words of her BASE advisor, Selma is "a very capable student" with a "strong work ethic."

At the time of our final interview, she was a week away from graduating with two associate's degrees: a liberal arts transfer degree and a general studies degree in math and sciences. Her plan is to earn a bachelor's degree in biomedical engineering on her way to attending medical school. She has been accepted to one of her state's leading public universities, but she has chosen instead to attend a satellite campus of the state's flagship university in the hopes of eventually transferring to that flagship campus (having been not admitted directly).

Rubie. Rubie is the second non-first gen in the study. Her father holds a technical certificate, and her mother has a bachelor's degree. Rubie lives in large metropolitan area located 30 miles from County. She has insight into how her family may affect her development of college readiness.

Rubie is knowledgeable about her college readiness because she can talk about what she does to achieve her success in the program and to position herself for further education. As of when we last spoke, she was preparing to participate in County's graduation exercises, and she will leave the program with a certificate in the Foundations of Information Systems. She needs to take only one college-level math class in an upcoming spring or summer semester in order to formally complete the program, after which she plans to attend a four-year undergraduate institution.

Rubie also is able to share what she believes has helped her to develop her practices. In particular, Rubie understands over four years what role that County has played in her development. She started in the 9th-grade academy of the program, began college classes in the spring of her 1st Year in the Middle College, and is nearly done with the program as of the conclusion of her third Middle College year.

County Faculty and Staff Participants

All County personnel are eligible to participate in the study. County employs less than 25 people, most of whom are faculty members or counselors. This number also includes the program's lean staff comprised of the Dean, two data and project specialists, and an administrative assistant. I speak with "key informants" (Patton, 2002, p. 321), which in this study means County personnel who have knowledge of how the program supports the development of students. This selection 'criterion' likely makes most of County's employees

eligible to participate. Almost all of the program's personnel play multiple roles at the school, giving them each multiple perspectives into how the program functions. For example, all instructors and counselors also act as advisors to designated students through the program's BASE (Better Accounting of Student Efforts) element.

I speak with seven faculty members who are key informants in a number of ways. First, with the participant students' permission, I speak with the BASE advisor for four of my five students. In so doing, my intent is to speak with faculty who are knowledgeable about delivering County's "soft skill," or noncognitive, curricula. I also speak with at least one teacher in each of the following positions: English Instructor, Mathematics Instructor, Science Instructor, Critical Thinking Instructor, and Guidance Counselor.

Last, I observe County faculty engaged in their work. I described these observations in more detail below.

Voluntary and Confidential Nature of the Study

For all participants, involvement in the study is voluntary. I also keep the data that I collect from participants confidential by securing the data and removing participants' names (and the names of anyone that they mention) from published or presented reports of the study's findings.

Data Collection

I primarily generate my data through the students in the study, and I then supplement their descriptions of their experiences and of the County program. With the students, I conduct a series of two or three semi-standardized open-ended interviews in which each student gives a self report of their college ready capacities and their development of those capacities (Patton, 2002; Pike & Kuh, 2005). I supplement my understanding of the student participants and the program itself using interviews with County personnel, observations of the program, and a review of program documents (Flanagan, 1954; Hammersley & Atkinson, 2007; Patton, 2002). This additional evidence adds ECD personnel's accounts of students' developmental experiences and gives me my own understanding of the ECD program beyond what participant students report.

Interviews With and About Participant Students

I guide my interviews with both the participant students and the BASE advisors based upon my three research questions. I place the protocols for both interviews in Appendix A and Appendix B respectively. For my first research question, I use the critical incident technique to

ask students (or their BASE advisors) to recall demarcated occurrences in which the students mobilize capacities that they associate with college readiness (Butterfield, Borgen, Amundson, & Maglio, 2005; FitzGerald, Seale, Kerins, & McElvaney, 2008; Flanagan, 1954; Gremler, 2004). For my second research question, I ask participants to describe, in concrete identifiable detail (R. S. Weiss, 1994), the activities within the ECD program design that may teach the students, or give them the opportunities to rehearse, the capacities that each student talks about (e.g., Reid & Moore, 2008). For my third research question, I ask participants to describe in similarly concrete detail the influences in students' communities that may teach them, or give them the opportunities to rehearse, the capacities that each student discusses (e.g., Carpenter & Peña, 2017). This last line of questioning is one way in which I differentiate the interviews with the students and the interviews with the BASE advisors. That is, I directly ask the students about this topic, but I only discuss the participant students' communities with BASE advisors when the advisor raises such topics.

The interviews with students take place over the course of a single semester. For three of the participant students (Mariama, Abdi, and Selma), I conduct three interviews, and each interview lasts approximately one hour. With one participant (Rubie), I conduct two, one-hour interviews; and with another (Steven), I conduct a single, two-hour interview. The faculty interviews about the students occur once for each faculty participant and last a half-hour. Those faculty interviews take place in the same semester as the student interviews. I conduct the interviews either in person or via conferencing software provided by my university, and I audio record each interview.

Supplemental Data Collection about the County Program

In order to develop my own understanding of the County context independent of the students' and BASE advisors' descriptions, I conduct interviews with additional County personnel about the program design. Those interviews occur once and last for an hour each. In two instances, I speak with the same County faculty member as part of these interviews and again in their role as a BASE advisor to a participant student. Those interviews occur on two distinct occasions. I place the protocol for the interview about the County program in Appendix C.

I supplement my knowledge about the County program in two additional ways. One is via observations. I observe on three occasions the standardized soft skill instruction that three

distinct County faculty provide to 9th-grade and 1st Year Middle College students. This instruction occurs during the first twenty minutes of class sessions that take place during the first five weeks of the fall semester. I also stay and observe the classroom instruction and lesson activities related to the course content that the County faculty then delivers after the soft skill portion of the class session. In addition, I observe four BASE advisory sessions during which BASE advisors meet weekly with their advisees in 9th grade and 1st Year of the Middle College. I also attend the County winter invitational during which the Dean and County students talk to prospective students and parents about the program.

I decided upon this list of observations after conducting preliminary visits to County, which I did in order to identify potential settings (and participants) through which to collect data relevant to this study (Hammersley & Atkinson, 2007). Using this method of "casing the joint," I sought out observable events that appear critical to County's development of students' college readiness (Flanagan, 1954).[27]

I also read about the County program in written program descriptions and curriculum documents (Patton, 2002). Specifically, these include the curriculum guide that all faculty follow for both the noncognitive (i.e., "soft") skills curriculum and the BASE advising meetings. I also collect the career pathways curriculum guide that County faculty used to teach students about choosing a degree and a career. (This includes a template educational development plan [EDP]). Finally, I collect information from the County website and its other public facing materials.[28]

Data Collection Validity

I attempt to collect multiple, overlapping sources of data during my study. In order to answer my first research question about the students' capacities, I speak not only with the students themselves but also with their BASE advisors (in four out of five cases). In order to

[27] In some cases, I will observe events that the program explicitly links to the development of college readiness (Rosenbaum & Becker, 2011). In other cases, I will observe program elements that exemplify the parts of an ECD design that the literature links to promoting college readiness (Geltner et al., 2014).

[28] PowerSchool is County's grade reporting system. Faculty, staff, students and parents access PowerSchool in order to review students' grades related to both their academic performance and their "soft skills credentials." They also can see comments made by instructors, which often relate to students' development of noncognitive capabilities. Each County student designs an educational development plan (EDP) in conjunction with County advisors in order to set out their individualized pathway through the program. One purpose of the EDP is to help a student lay out a plan for ensuring she can schedule all of the courses she needs in order to earn her high school diploma, earn a certificate or associate degree, and/or transfer with accepted credits to a four-year college or university that is a target for the student.

answer my second research question about the County context, I not only hear from the participant students about their experiences but also speak with County personnel who deliver the program and observe various elements of the program.

Cross checking across data sources contributes to the validity of the study. I test if consistent images of County's program and its effects on students emerge across the data. Using multiple forms of inquiry (i.e., interviews, observations, documents) make it more likely that I would catch differences in how the various data depicted the same phenomenon. Those differences add detail, or "nuances," that would otherwise be lost if I utilize only one data collection method (Patton, 2002, p. 248).

Additionally, I specifically design the student interview protocol to maximize the validity of students' self reports (Pike & Kuh, 2005).[29] Validity was particularly important to this method because my student interviews generate data related to all three of my research questions.

Data Analysis

The primary byproduct of the above methods is fifteen hours of recorded interviews either with the students or with the BASE advisors. These interviews are transcribed.[30] Below, I explain how I code that data, sketch case studies of each student from the coded data, and comparatively analyze the student cases. At each step, I address the three research questions.

Data Coding

Coding Specific to Each Research Question. From the recordings and transcriptions, I extract "fragments" of words and sentences (Charmaz, 2006, p. 43). I bound each fragment in one of three ways.

For the first research question, the relevant fragments are critical incidents in which a student describes the capacities that they believe are important to college readiness and/or their postsecondary success. I first label these fragments in one of two ways: (a) broadly as a

[29] Pike and Kuh (2005) argue that student self-reports are a "valid and credible" source of data. They cite the latter author's earlier work to state "that self-reports are likely to be valid under five conditions: 1. the information requested is known to the respondents; 2. the questions are phrased clearly and unambiguously; 3. the questions refer to recent activities; 4. the respondents think the questions merit a serious and thoughtful response; 5. answering the questions does not threaten, embarrass, or violate the privacy of the respondent or encourage the respondent to respond in socially desirable ways" (pp. 282-283).

[30] I generate an additional six hours of recorded interviews with County faculty about their program. I also have the aforementioned documents as well as hand-written field notes from my observations. I use that data to supplement my knowledge about the County program, but I do not utilize that data during my analysis.

behavior/attitude, or (b) more narrowly as a strategy for putting behaviors and attitudes into practice (Karp & Bork, 2014). Second, I inductively code each of these fragments with the name that the student gave to the capacity that she describes. Third, I deductively give each fragment a code that sorts them into the three categories of practice from the framework (Maxwell, 2013): noncognitive, academic, or related to college knowledge (Annenberg Institute for School Reform et al., 2014; Conley, 2003, 2011, 2014; John W. Gardner Center for Youth and Their Communities, 2014; Mishkind, 2014) (Table 2.1). I further subdivide the noncognitive category using codes for "taking ownership of learning" or "learning techniques. In these ways, I use modified analytic induction in order to categorize and define the student capacities that I identify (Patton, 2002). I do so in order to follow a procedure similar to that used by Karp and Bork (2014).[31]

Fourth and finally, I note using a "0" or "1" code whether there respectively is no evidence or evidence of an association between a capacity and an indicator of college success. I consider the following to be such indicators: an effect on GPA or a course grade, course completion, persistence, degree attainment, academic and social postsecondary integration, and postsecondary enrollment (Balfanz et al., 2016; Chen & Carroll, 2005; Choy, 2001; Edmunds, Unlu, et al., 2017; Mamiseishvili, 2010; Pascarella et al., 2004).

For the second research question, the relevant fragments are demarcated acts in which a student develops a capacity in the County context. To make those acts identifiable, I look for times when students engage in either anticipatory socialization or role rehearsal in order to develop a capacity (Karp, 2007). I include in this group those acts that happen at County, at the community college, or as part of an activity that either County or the community college organized or facilitated. That is, I consider a fragment to be part of the County program when it took the form of the program's core work or components of its infrastructure (Bryk et al., 2010; Elmore, 2000; Peurach & Glazer, 2012; Peurach & Neumerski, 2015). First, I deductively label these fragments with one of the program design elements that I delineate in the initial framework (Table 2.2). I then code these fragments with the name of a capacity that the element affects. When possible, I associate the fragment with the name of the capacity that the student says she develops in that instance, which is how I code most this data. In the rare cases when the student

[31] When I apply this or any of the deductive coding schemes that I mention, I anticipate that some of the fragments may not fit the labels that appear in the framework (Maxwell, 2013). When that happens, I am prepared to place fragments into an "other" category.

does not mention a capacity, I use the initial framework and the list of emerging capacities (i.e., those found while answering the first research question) in order to deductively label the fragment with the name of a capacity that the student seems to be learning in that instance. I further code each of these fragments by whether the element occurs prior to or while the student is taking community college classes.

For the third research question, the relevant fragments are the factors within a participant student's community that they say have an impact on them. These factors exist outside of school and include (a) persons, institutions, media, languages, and physical conditions with which students interact regularly as well as (b) cultural and social identities with which students identify or that they internalize (Bransford et al., 1999; Orbe, 2004). I deductively code these factors with the names for community factors found in the initial framework (Table 2.3). Then, as I did for the fragments about the County context, I code the fragments about community with the name of a capacity that the factor affects. I do so inductively when the student talks about a capacity, or I use labels from the framework and emerging data about capacities when the student does not mention a capacity by name.

Coding Steps Universal to All Three Research Questions. I utilize Microsoft Excel to record and sort my data. I place each fragment into a cell within a distinct row of the database. I note which informant provides the fragment and which student was the subject of each fragment. I keep a distinct data sheet for each student, and on that sheet I include the data from that students' BASE advisor along with the data from the student herself.

I record which interview the fragment appears in and the minute:second marker during the interview when the fragment occurred. I use these latter markers to calculate how much time each fragment lasts. I also keep a count of how many fragments fell into the coded categories I describe below. Using this information, I calculate how much interview time and how many lines of code are associated with any given coded category.

Case Study Generation

As an intermediary step toward analyzing the five students' experiences at County together, I first generate individual case studies of each student. Within each case, I answer all three research questions. That is, I summarize (1) the students' college ready capacities as well as how (2) the County context and (3) the student's community influence the development of those capacities.

For the first research question, I list all of the capacities that the student discusses and synthesize how the student describes each capacity. In order to list the capacities, I organize the student's behaviors and attitudes, first by category (i.e., noncognitive ownership of learning, noncogntive learning techniques, academic, and college knowledge) and second by the inductively coded names the student gives the capacities. Each time a student talks about a capacity, she provides a fragment in which she describes what it looks like to put that capacity into practice. In other words, she mentions the strategies she uses to enact each behavior and attitude. Thus in order to describe each capacity, I synthesize similar strategies that the student associates with the capacity while also including single, distinct strategies that the student mentions. In the student's case study, I then delineate all of those strategies that characterize the capacity, in the student's opinion (Karp & Bork, 2014).

For the second research question, I list all of the County program design elements that the student says that she experiences. The deductive codes from the framework (e.g., rigor, relationships, dual enrollment) that I applied earlier allow me to name which elements the student encounters. I then relate how the student perceives that each element affects her. I do by synthesizing both what the students says that each element does (e.g., the County advisors help her design her course pathway needed to earn a particular degree) and the characteristics that the student associates with the elements (e.g., County personnel are encouraging and good listeners). I also name which capacities the student thinks that the elements affect.

For the third research question, I list all of the community factors that the student talks about. It is easy to see which ones the student experiences because each of the relevant fragments are labeled with the names of community factors from the framework (e.g., family, employment, race). The student shares anecdotes about these community factors (e.g., facing a challenging customer or co-worker), lessons that the factors teach (e.g., older siblings sharing their own experiences in college), messages that the factors pass on (e.g., parents stressing the importance of education), and other ways that community has an impact on them. By synthesizing these fragments, I convey how the student perceives that each factor shapes her. I also identify the capacities that the students believes that the factors affect.

The case studies are useful for coalescing, organizing, and describing my data within the confines of each student. As explained just above, I create separate lists that capture each student's conception of college readiness, the County context, and their communities. I

respectively organize each of those lists by the names of the capacities, program design elements, and out-of-school factors that constitute each list. And, those lists also retain the student's rich depictions of each capacity, element, or factor. This way of arranging each student's narratives by capacities, context, and community is useful for my cross-case comparison, as I describe momentarily.

More so than simply making my analysis tidy, the case studies prove useful and important in other ways. Because I wrote each case study in succession, each subsequent case study helped me to evolve not only my analysis of the data but also my write-up of my findings. To be more specific, sketching a distinct case for each participant student allows for me to see that student's story holistically and uniquely. By holistically, I mean that patterns emerge within each student's developmental journey over their time in the program that may otherwise be lost on me. By uniquely, each case study reveals distinct ways in which program influences and community influences beget student capacities, and distinct ways that capacities beget college readiness indicators, for that individual student. So, with each student's case, I make new, distinct observations about the interaction of variables. These holistic and unique observations inform both the case studies that come after and how I reconsider the case studies that came before. It is in these ways that patterns begin to emerge across the case studies.

Cross-case Comparisons

I use structured, focused cross-case comparisons in order to coalesce the findings about the students (George & Bennett, 2005). The parallel structure of the five case studies, organized by how each student's narrative addresses the three research questions, allows for direct comparisons of the case findings. Within each research question, I identify and coalesce the findings that the cases have in common (Charmaz, 2006; Maxwell, 2013), and I make sure to set aside some notable findings unique to only one case (Patton, 2002).

The results are the findings and inferences that I present in the next three chapters. In Chapter 4, I develop a list of noncognitive, academic, and college knowledge-related behaviors, attitudes, and strategies that the students associate with college readiness. In Chapter 5, I present a list of County's design elements that the students claim to affect their development of college readiness, along with which specific capacities may result. In Chapter 6, I build a list of the community factors that participant students say influence the development of their college readiness, along with which specific capacities may result.

As I discuss each of these lists in the upcoming chapters, I highlight what answers to the three research questions I learn particularly from the narratives of the three first gens, Mariama, Abdi, and Steven. I do so in order to provide examples that relate specifically to the driving concern of this study, which is to aid how we think and reason about the development of first gens' college readiness.

I compare the stories that Selma and Rubie, the two non-first gens, tell to Mariama's, Abdi's, and Steven's narratives. Those comparisons, which come in three forms, also help me to highlight the participating first gen's perspectives. First, I notice when Selma's and Rubie's conceptions *reinforce* how Mariama, Abdi, and Steven depict the three dimensions of college readiness on which I focus in this study: capacities, context, and community. Second, I pay attention when the two non-first gens *supplement* the conceptions of capacities, context, and community with details that the first gens do not discuss. Third, I point out when Mariama, Abdi, and Steven conceive of capacities, context, and community in ways that Selma and Rubie do not, thereby *accentuating* conceptions that are unique to the three first gens. In all instances, I am cautious, in my write-up, to talk about comparing Mariama, Abdi, and Steven with Selma and Rubie. That is, I only claim to note similarities and differences between the first gens and the non-first gens *in this study*.

I conclude each of the three upcoming chapters by collating the first gen students' conceptions with the initial framework from Chapter 2. I do so by comparing and contrasting the lists of college ready capacities, contextual elements, and community factors that I pull from the first gens' stories with the lists that appear in Tables 2.1 – 2.3. My aims are to utilize this study's findings to (a) animate and exemplify the core concepts in the framework, and (b) demonstrate overlaps and connections between the framework's three approaches to understanding college readiness. In so doing, I intend to use the lived experiences of the first gen students to comment on the framework, particularly its parts that are not yet concrete or cohesive.

Chapter 4 – College Ready Capacities

Introduction

A purpose of this study is to use what I learn from a group of students to reconsider how the literature frames the current thinking and reasoning about first gen college readiness. In this chapter, I specifically look at the students' experiences through the lens of the first body of scholarship, which seeks to understand college ready capacities. In dialogue with the part of the framework built upon that literature, I hear from the students in the study about what college readiness looks like in practice for them and how they perceive it helps their postsecondary performance. I guide this inquiry with the study's first research question:

> What behaviors, attitudes, and strategies did students participating in the study (a) believe were important to put into practice in order to be ready for college and (b) cite as having made a difference in their college success?

By way of summary, the five students participating in this study report that the following behaviors and attitudes were important to them and made a difference in their college success: self-advocate, build social capital, set goals, follow through, know yourself as a student, build self-reliance, manage your time, attend, organize and prepare, ask peers for help, navigate college systems, appreciate personal identity, think critically, write well, and know core content. By and large, both the first gen and non-first gen students in the study cite very similar college ready behaviors, attitudes, and strategies as being important to their practice and to their success.

In this chapter, there are two levels to my analysis of these findings. First, I present in detail the students' conception of the capacities that they associate with college readiness. I pay particular attention to the first gens' conception while also explaining how the non-first gens' stories reinforce and supplement what the first gens report. Second, as is the purpose of this study, I then compare that conception with the list of college ready behaviors and attitudes in the initial framework.

Participating Students' Conception of College Ready Capacities

All five students in the study believe that their noncognitive behaviors and attitudes are particularly important to put into practice in order to be ready for college. The vast majority of informants' interview time (Table 4.1) and coded utterances (Table 4.2) are dedicated to

discussing noncognitive practices. The participant students do consider a smaller number of college knowledge-related and academic practices to be important for college readiness.

Table 4.1

Proportions of Interview Time Dedicated to Each Category of Practice

	First Gen Participants			Non-First Gens		
CATEGORY OF PRACTICE	Mariama	Abdi	Steven	Selma	Rubie	**OVERALL**
Noncognitive	90%	86%	80%	53%	93%	**79%**
Ownership of Learning	*59%*	*27%*	*60%*	*35%*	*51%*	***43%***
Learning Techniques	*31%*	*59%*	*20%*	*18%*	*42%*	***36%***
College Knowledge	7%	10%	9%	25%	0%	**11%**
Academic	3%	5%	11%	23%	7%	**10%**

NOTE: Columns may not add to 100% due to rounding.

Table 4.2

Proportions of Coded Utterances Dedicated to Each Category of Practice

	First Gen Participants			Non-First Gens		
CATEGORY OF PRACTICE	Mariama	Abdi	Steven	Selma	Rubie	**OVERALL**
Noncognitive	91%	84%	85%	60%	94%	**80%**
Ownership of Learning	*49%*	*26%*	*60%*	*39%*	*46%*	***42%***
Learning Techniques	*42%*	*58%*	*25%*	*21%*	*48%*	***38%***
College Knowledge	6%	10%	5%	18%	0%	**9%**
Academic	3%	6%	11%	22%	7%	**10%**

NOTE: Columns may not add to 100% due to rounding.

I organize the remainder of this chapter by these categories of student practice. For each category, the students list the behaviors and attitudes that they believe are important to college readiness, thereby answering the first part of my first research question. Tables 4.3 – 4.6 summarize those capacities. For each behavior and attitude, the tables also list the constituent strategies that the students say that they put into practice (e.g., Karp & Bork, 2014).[32]

[32] Across the three categories of practice, I present the behaviors, attitudes, and strategies that the students had in common as well as some notable practices unique to one of them.

In the last column of these tables, the students then offer evidence that the capacities that they name are college ready. The students conclude that *all but one* of the identified behaviors and attitudes make a difference in their college success. Specifically, student participants associate their capacities with helping them earn good grades, complete courses, persist in the program, attain degrees, academically or socially integrate into the community college, or gain admission to four-year institutions. Some also credit their capacities with helping them meet County's own indicator of college readiness: its soft skills credential. I use these findings to answer the second part of my first research question.

Throughout the text of the chapter, I use the literature to substantiate my observation that the students' capacities are forms of college readiness. In tables 4.3 – 4.6, I list in parenthetical gray text the names of any capacities from the literature that (a) are comparable to the ones that the students name and (b) are associated with either college readiness or success, according to the researchers who write about them.[33]

Noncognitive Capacities

The students named noncognitive practices through which they took ownership of their learning, which I list first. They also named noncognitive learning techniques. They offered in rich detail the strategies that they mobilized to put these behaviors and attitudes into practice, and they provided examples of how each contributed to at least one indicator of college readiness. I also found that all of these practices corresponded with a skill named in the college readiness literature, though in some instances the students broke down a skill from the literature into multiple behaviors or attitudes.

Taking Ownership of Their Learning. Summarized in Table 4.3, the students indicate that they took ownership of their learning in six ways. They self-advocate, build social capital, set goals, follow through, know themselves as students, and build self-reliance.

[33] I include, from the literature, the capacities that I list in parenthetical gray text when either (a) college readiness advocates and experts talk about capacities using the same names that the students give to their capacities, or (b) the advocates and experts at least define their capacities similarly to the ones the students mention (Annenberg Institute for School Reform et al., 2014; Conley, 2011, 2012, 2014; Nagaoka & Holsapple, 2017). In addition, I determine that the capacities from the literature are particularly good matches for the ones that the students list when (a) researchers make connections between those capacities and indicators of college success (e.g., GPA, persistence) *and* (b) the students describe the same or similar connections in their stories (Kitsantas et al., 2008; Pascarella et al., 2004).

Table 4.3

Students' Conception of Capacities Related to Taking Ownership of Their Learning

BEHAVIORS & ATTITUDES	STRATEGIES	COLLEGE READINESS INDICATORS
Self-advocate (Help seeking)	• Meet regularly with your BASE advisor, County teachers, and community college faculty (4) • Meet as needed with the County Dean or community college personnel (2) • Meet during office hours as well as before and after class (2) • Communicate professionally and prepare so as to respect others' time (3) • "Get ahead" of issues that affect your attendance or performance in school (2)	Course grades County soft skill credential
Build social capital (Help seeking)	• Build up teachers' knowledge of you as a student and person (2) • Regularly greet teachers with a friendly demeanor and ask how they are doing (2) • Get to know your teachers' respective styles of teaching (2) • Get to know why teachers are interested in their subject (1) • Express gratitude to those you meet with (1)	Course grades Admission to four-year institutions
Set goals (Goal setting & focus)	• Explore and pursue your interests and values through course choices and classwork (3) • Set a career goal (2) • Be willing to change your mind and "not rush" (1)	Degree attainment
Follow through (Goal setting & focus)	• Set and take incremental steps and "middle-term goals" aligned to long-term goals (3) • Engage in daily tasks aligned to goals (2) • Honor commitments, including to yourself (2)	Course grades Degree attainment
Know yourself as a student (Self-awareness)	• Check on your performance in a course and ask what you can do to maintain or improve (3) • Recognize when you need help or are struggling (2) • "Do not worry what others think" (1) • Avoid insisting that one's position is "always right" when challenged by teachers (1)	Persistence
Build self-reliance (Self-efficacy)	• Seek out challenging performance tasks inside and beyond the classroom (1) • Recognize successes, and what you did to be successful, in challenging circumstances (1) • Find new ways to pursue a goal even after an initial failure (1)	Course completion

KEY:
Bold text = Evidence from case suggested that student behaviors & attitudes were college ready
(Parenthetical gray text) = Comparable skill that literature associated with college readiness
(#) = Number of participating students who named a given strategy

Self-Advocate. The majority of the students state that they self-advocate by meeting regularly with their BASE advisors, County teachers, and the community college faculty. Selma

(a non-first gen) and Abdi (a first gen) say that they use these meetings to discuss course content and procedures as well as their performance. Selma and Mariama (a first gen) add that they use their meetings with County faculty to get help understanding course content covered in community college-level classes. Rubie (a non-first gen) emphasizes that self-advocacy is her first move any time she needs assistance: "The number one thing was realizing that I needed help and I couldn't do it on my own. And then advocating for myself and asking somebody like: 'hey, how can I get help?'"

To that end, the students also meet with the County Dean or community college personnel as they run into trouble. Selma and Rubie, the two non-first gens, both talk about using this self-advocacy strategy at times when the community college makes it more difficult for them to sign up for or complete courses. Specifically, Selma's BASE advisor talks about challenges she faced in a soon-to-be-defunct community college honor's program. Selma specifically confronted a lot of "frustration," the BASE advisor recalls, because the community college would "routinely" cancel sections of honors coursework due to low enrollment while seemingly changing the honors program requirements "every semester." Her BASE advisor says she observed Selma self-advocate by emailing and meeting with her BASE advisor, the head of the honors program and other program advisors, and County's Dean. Selma's BASE advisor then explains why that strategy is one of Selma's strengths:

> [The] sort of going back and forth between both worlds: the world of [County] and the world of [the community college]. She navigated that really well and [all while] probably having more of a challenging thing to navigate than most students did.

Rubie needed to similarly navigate both worlds after one her community college professors stopped holding in-person class sessions and she subsequently failed the course. Before contacting the Dean and a community college department chair for help, she employed the strategies of first asking her BASE advisor for recommendations of who could help her; and she later enlisted a peer who had the same problem to advocate with her.

Inherent in these two stories is the idea that communicating effectively is an important strategy for self-advocating. Selma says she does so by constructing her emails in ways tailored toward adult educators. Rubie and Steven (a first gen) both find it helpful to be prepared with their requests and supporting information when self-advocating. During the incident acknowledged just above, Rubie says that her BASE advisor and the County dean taught her to get ready for meeting with the community college department chair: "They told me to gather

evidence of like how bad I did in the class and the dates that I emailed the teacher (i.e., professor) asking for help and stuff like that."

In addition to using self-advocacy to react to problems, Steven and Rubie both mention times when they "get ahead" of issues that affect their attendance or performance in school. Rubie advises mobilizing this strategy with her coursework: "Make sure you talk to your instructors at the first sign that you need help or you're not understanding something."[34] With Steven, he stays ahead of trouble in part by taking ownership of his part in the trouble. His BASE advisor recalls:

> He's a really good at advocating. He's a model advocator…. He definitely, you know, has that kind of disarming sincerity where you know if he did, if he screwed something up, he'll just be like: "Man, I really screwed that up you know." And you know, I think it's served him well because he's, you know, whenever he has had situations where he's had to advocate, you know he's been able to just be honest and you know forthright about whatever's going on here and gotten good results from the situation.

By "good results," the BASE advisor means that teachers are willing to help Steven because he takes responsibility for his part in causing the problem to begin with.

Abdi (a first gen) as well as Selma and Rubie (non-first gens) note that a logistical part of self-advocacy is scheduling a time to connect with personnel from County or the community college. Abdi recalls one anecdote that typifies when and where he reaches out:

> So teachers have office hours, so I just go in the office hours and actually the teacher will like literally, he will tell you: "this and this is going to be on the test." He won't tell you outright or the exact question, but he'll give you a topic. He'll tell you stuff that he didn't say in front of the whole class. It's very important to go, you know, take your time to go there to talk. You will tell the teacher that, you know, you're trying your hardest to, you know, to pass a test. And I think there's benefit to that too.

In this quote, Abdi adds that one of his strategies for self-advocacy is using meetings and other communication to highlight for teachers his level of effort and ways of participating in their classes. Abdi's BASE advisor says that he also "checks in" with his teachers to "talk about [his] progress."

Based upon the college readiness literature, it is undetermined whether the students' self-advocacy behaviors, as defined by the above strategies, are college ready. On the one hand, their strategies for self-advocating mirror what the college readiness literature calls "help seeking,"

[34] The students often speak in prescriptive terms, advising a nameless student that "you should." I interpret these as statements of what practices they believe are important to being college ready.

which it defines as acts of getting aid from school personnel (Byrd & MacDonald, 2005; Nuñez et al., 1998). On the other hand, there is limited, narrow research that links help seeking to positive academic performance, which is one established indicator of college readiness (Bahr, 2016). Namely, English as a Second Language (ESL) students who get help from a writing center earn better grades in their writing courses (J. D. Williams & Takaku, 2011).

The students themselves more convincingly establish that their self-advocacy behaviors are college ready. Abdi (a first gen) credits self-advocacy with improving his course grades, a measure of college readiness (Balfanz et al., 2016). He recalls:

> For biology, I had a quiz and, with science I'm very bad…. So I just after class, I asked [the professor] can I schedule a meeting with him. And after that he was literally, he made it so easy for me. He just said: "you know, just go over the connection between the main important things." So I just went over those things. And I passed it. I'm pretty sure if I didn't go [talk to him], I wouldn't have passed because there would be too much, too much to study.

Moreover, two of the students appear, as a result of self-advocating, to earn their soft skill credential, which County uses along with course grades as a benchmark of college readiness. Adbi's BASE advisor says that his self-advocacy strategies of meeting and communicating with teachers to ask questions are among his "soft skills [that] indicate that he is college ready." The advisor specifies that these strategies are among those that convince Abdi's County teachers to soft skill certify him and allow him to initially start college coursework. In addition, Rubie uses self-advocacy to clarify with County teachers that her frequent absences and tardiness result from transportation issues:

> [O]nce I started advocating for myself, because I live in [the City], so it you know takes a while to get to school. So when I started to advocate for myself, you know, it started to become less of a problem for my soft skill grade. They realized that I wasn't just late for class because I didn't care or I was trying to skip out of class or you know.

Through self-advocacy, Rubie (a non-first gen) reports also meeting County's soft skill credential, as one threshold for college readiness.

Build Social Capital. Steven (a first gen) captures the students' definition of building social capital, which to them meant being "comfortable" and having a "rapport" with County and community college personnel. Rubie further advises that building social capital involved: "Show[ing] instructors that you're there to learn and that you actually care about being there."

The students then indicate that the social capital they built enables County and community college personnel to "help you out in the end," as Mariama (a first gen) notes.

Namely, Mariama states that social capital helps her to have discussions with teachers or ask questions about course content. Similar to Mariama, Selma (a non-first gen) adds that she builds up teachers' knowledge of her as a student and person in order to justify asking for their help later:

> [A] person that you should have good social capital with is obviously a professor. Because like I said, they're the ones if you build a good relationship with them they can help you out in the future if you need recommendations and everything like that. And also like, just visit. Like if you need help with something after class, like to help you, go to their office hours, you know.

Like Selma, Steven (a first gen) also uses the language of building social capital and building relationships interchangeably.

As a reciprocal of Selma's strategy, another part of her social capital building behavior is getting to know why teachers are interested in their subject. She recalls:

> Like my chem teacher: like I would actually consider her like a friend, you know. And she's helped me so much and she actually made me really like the subject so I would and I want to have like a nice bond with her. The first chem class I took was chem [at County], and I didn't really understand it. And my chem teacher [at County] really helped me a lot. But you know when you don't understand the subject, it's like you don't like latch on to it like other kids and so it's like: "I don't really want to have anything but to do with it." But I knew that I would need more chem classes because obviously I'm going into medicine: it's a really important part…. [With my college chemistry professor however,] it was her enthusiasm about is what really, like the way you think if you learn chemistry from someone who obviously doesn't like chemistry then that kind of rubs off on you. But her enthusiasm for it kind of like drew me in. And you know, she really helped me understand it better. And after that, like I was just, I took the next level class with her.

Here, Selma talks not just about using this strategy but also how it helps her to go from struggling in her college chemistry course to incorporating it into her degree pathway. Mariama (a first gen) employs a corollary of this strategy in that she says that she got to know her teachers' respective styles of teaching. One unique way in which she does so is learning that "little thing that every teacher has that they don't like students who in their class to do."

The students share not only what they try to accomplish by building social capital but also what actions they take to do so. Mariama makes a point of regularly greeting teachers with a friendly demeanor:

> When I walk into the [County] office, I say hello. You know, I will talk to [names a number of teachers]; it does not matter. Teachers I never had in class before; there's a lot of teachers who know me, and I never had their class. I had a teacher [from County] walk up and know my name and say: "I know a lot about you." It's OK to speak to

> them… even like the Dean. A lot of people are intimidated to speak to him; but there's going to be a moment where you're going to need him. So, I am going to always speak to you when you walk in. That's what I do; I speak to everybody.

Steven, a fellow first gen, takes similar approaches in that he balances casual conversation (e.g., greeting with "what's up", being able to "have fun" and "joke around with" teachers) and signs of respect (e.g., a handshake, asking how teachers were doing, being attentive during class). Selma (a non-first gen) suggests that another strategy for building social capital through respect is when she expresses gratitude to those who take time to meet with her.

The ways in which the students build social capital incorporates some of the same strategies as self-advocacy. For instance, Mariana and Selma talk about connecting with adults at the school through regular meetings, going to office hours, and staying after class. In these ways, the students defined both self-advocacy and building social capital the same way that the college readiness literature defines help seeking: as getting aid from school personnel. While this overlap alludes that building social capital is one of the students' college ready practices, it more interestingly suggests that the literature's definition of help seeking could include both the self-advocacy and building social capital behaviors that the students describe.

Selma talks about the ways in which her behavior of building social capital seems to be college ready. She broadly credits that practice (alongside others) with benefiting her college course grades, as one indicator of college readiness:

> Having good attendance, building social capital, and following through: I feel like those were the ones that really stuck with me and just thinking of those kind of like helped me to be successful. I really feel like because of those soft skills, I'm able to be where I am today, you know. I'm like proud of my grades, proud of like all the work I've put in to get myself here, and it's because of those skills.

Additionally, Selma reveals that having built social capital yields the recommendations from teachers and professors that she needs to apply for admission to four-year universities, thereby helping her to take a step that Barnett (2016) associates with college readiness. In this example, Selma's social capital building behavior may be college ready and it may help her to develop college-knowledge related behaviors related to understanding the admission process (Michigan College Access Network [MCAN], 2017).

Set Goals. The students demarcate goal setting as a behavior through which they pick and focus on a career aspiration and/or a future academic plan. Selma, for instance, sets her sights on a bachelor's degree in biomedical engineering at a four-year university leading into

medical school. Inherent to those goals is her strategy of considering multiple possibilities: namely, seeing the choice of biomedical engineering not only as a way to get into medical school but also as a "backup" career. Abdi (a first gen) is similarly academically and career-oriented. He sets the goal of earning a graduate degree in business that he will use as an entrepreneur to bring jobs to his native country of Somalia.

Setting goals for schooling and careers is not something that the students indicate that they do in a vacuum. They say that they augment their goal setting behavior with strategies through which they explore and pursue their interests and values through course choices and classwork. As Abdi makes clear to me, he chooses his business degree pathway within the County program because he is driven by his desire to help:

> You know, where I'm from, the people can't get employed… [so] the reason I'm doing business is because business is what builds up the country, that's what I learned. I used to think it was government and stuff. But once you employ people, they have jobs, you don't have to worry about like a lot of stuff.

Selma does something similar in that she takes college science courses and earns two general studies associates degrees that respectively facilitate her chosen career in medicine and the more immediate step of transferring credits to a four-year university. As she puts it: "[When you] pick and choose your classes, make sure you like it because you know this is going to help you determine what you're going to do." She tells me that she also uses her schooling in a more granular way to help her set her goals. She choses topics of interest not only to motivate her work on class projects but also so that she can use those projects to explore future goals.

Steven (a first gen) indicates that he guides his pathway in the County program based on his interests. However, he and his BASE advisor talk about how he allows room to change his mind about his goals and "not rush" toward picking a degree pathway.

As defined by the strategies that the students indicate that they put into practice, their goal setting behaviors focus on earning degrees through the County program. Those behaviors may be college ready because the college readiness scholarship also defines "goal setting and focus" as the achievement of a postsecondary degree (Horn & Weko, 2009). In turn, research associates goal setting and focus with two indicators of college readiness: a better college GPA (Harackiewicz, Barron, Tauer, & Elliot, 2002) and students' academic and social integration into college (Próspero & Vohra-Gupta, 2007).

Steven's case provides evidence that goal setting, as he and the other students describe, could be associated with college readiness. His BASE advisor claims that Steven's goal setting enables his progression toward a degree: one measure of college readiness (Warburton et al., 2001).

> You know, we tell students all the time like you know someday you're going to need this and most kids are like whatever you know what are you doing for me right now. Steven I think is someone who kind of gets like this is all building up skills and experience that you'll need someday in the real world so to speak. And so that is one thing I think has been part of what has, you know, when he has been successful. I think that's been when his coursework and his bigger picture goals have been really aligned.

The BASE advisor goes on to say more explicitly that Steven has success earning the coursework credits he needs for attaining an associate's degree in liberal arts (despite frequently changing goals and thereby accumulating some unneeded course credits).

Follow Through. Closely related to goal setting in the students' minds is the importance following through. Steven establishes how goals drive follow-through for him:

> If it's something that you want to stay committed to enough to be successful, you need to have the ability to follow through with it and complete it, giving it you're all, you know…. Then when you enjoy it and stick to it, then set a goal and take baby steps to achieve it.

In the latter part of this quote, Steven alludes to the follow-through strategy of setting and taking incremental steps aligned to long-term goals. Selma (a non-first gen) gives examples of such strategies. While completing a semester project in her County English course, she notes that she breaks down tasks into steps while setting and meeting interim deadlines for those tasks. She also says that she checks in with her teacher regularly about her progress on the term-wide project.

The students also mention that they use "middle-term goals," as Steven put it, when going after longer-term goals like fulfilling their chosen degree pathways or starting a career. For example, Selma talks about scheduling and completing the classes, placement tests, and other prerequisites for her degrees. Steven notes taking similar steps, and he adds that engaging in daily tasks aligned to goals is equally important, such as when he reads regularly to learn course material.

In a sense, follow through is as much an attitude as it is a behavior for the students in this study. Specifically, they note that honoring commitments, including to themselves, is an important state of mind to add to their follow-through practices. Selma describes this strategy:

> You know, following through you know with everything. If you say you're going to do something, do it. Not just with other people but with yourself. Like, if you set a goal for yourself, make sure you follow through with that. Like if you tell yourself you're going to study, don't push it off. Because I feel like not following through with your schedule kind of messes everything up and it pushes you back a little bit. And also just following through with people to build that social capital right.

She remarks that she applies this attitude to school, social commitments, extracurricular activities, and her part-time job.

Similarly, Steven's BASE advisor says that Steven "definitely has shown that ability to kind of get to the bigger picture and to think long term and to kind of recognize the incremental steps that he needs to take to achieve those bigger goals." To illustrate how committed Steven can be to following through on his goals, the BASE advisor recalls how Steven at one point thought he would have a career as someone who broadcasted his video gaming via social media. Set on that goal, he invested in audio-visual equipment for that purpose. Yet, when his video gaming habit started to interfere with school, Steven did not simply take his advisor's guidance to cut back. Rather, dedicated to a new goal of becoming an entrepreneur and seeing school success as instrumental to that goal, Steven announced to his advisor soon thereafter that he had sold all of his equipment, including the video gaming system itself. While his goals admittedly changed, Steven took decisive action to follow through on each one along the way.

The college readiness literature discusses goal setting *and focus* together, with the latter paralleling how the students defined follow through. That is, the literature states that goal setting can take the form of earning postsecondary degrees, and in parallel goal focus (or follow through) is enrolling in and completing the programs leading to those degrees (Harackiewicz et al., 2002). Because researchers associated goal setting / focus with indicators of postsecondary success as noted above, student participants' follow through behavior also may have been college ready.

Two quotes that I present above containe evidence from the cases that the students' follow through behaviors could be associated with indicators of college readiness. I quote Selma as saying that following through benefits her course grades. In Steven's case, I quote his BASE advisor as saying that, because Steven follows through using "incremental steps," he is able to get closer to earning his degree.

Know Yourself as a Student. Logically, what each student thinks is important to know about themselves as students varies. Regardless, two common strategies emerge from their

narratives. First, three of the students check on their performance in courses and ask what they could do to maintain or improve. For example, Rubie (a non-first gen) observes:

> [T]here's kids who they are upset that they're the not in college classes [because they are not soft skill certified] and they don't go talk to the teacher about like what they could fix. And they just go semester and semester without knowing, you know. Just go talk to your teacher and see what you can fix is the most likely way to help your soft skills [and thereby get you into college classes].

Rubie recalls one specific anecdote when checking in about her performance gave her professor the opportunity to tell her she was doing better than she anticipated in a class, thereby her stop "stressing out" about the class.

Second, for the participants, knowing themselves as students also means recognizing when they need help or are struggling. As I quote Rubie earlier as saying, she states that she asks for help at the "first sign" of academic or personal difficulty. Steven (a first gen) adds that he finds it equally important to monitor his mental well-being. Steven admits to contemplating, in the months before he and I spoke, dropping out of County to join the military. He says he was "depressed" and "embarrassed" that he would not graduate with his perceived cohort (though County does not use a grade-level cohort model). But, Steven says he became excited by school when he saw that his desire to drop out was driven by what he believed others thought of him. Rather, with the help of County advisors, he came to see that there would be nothing embarrassing about "being a nineteen year-old with a college degree," especially one who had the sense to let County continue paying for his courses rather than dropping out to finish on his own. In effect, Steven lets his goal drive his thinking rather than his emotional response to others' perceptions of him. He subsequently realizes that "not worrying what others think" is another good strategy to use when knowing one's self as a student.

One of the other first gens, Mariama, also uses a difficult situation to learn how to know herself as a student. She recalls a clash of personalities between her and a County math teacher that she says resulted in her failing a course. She attributes her later success, with the same teacher in the next semester, to changing her "attitude" and being willing to not insist upon being "right" all the time when communicating with the math teacher.

The college readiness defines the skill of "self-awareness" much in way that the behavior of knowing one's self as a student appears in these latter stories from Steven and Mariama. That is, it is defined as being mindful of one's own emotions, beliefs, and how both alter one's perception of one's circumstances (Davis, 2010; Stebleton & Soria, 2012; Tate et al., 2015).

Because the literature defines self-awareness similarly to how the students describe knowing themselves as student, the evidence linking the former to college readiness may be relevant to establishing that the latter is also a college ready capacity. Specifically, self-awareness is linked with physical and mental well-being (C.-C. D. Wang & Castaneda-Sound, 2008), which in turn is associated with positive postsecondary grades (Trockel et al., 2000). The most direct comparable example from the cases is Steven using self awareness / knowing himself to decide to persist at County. Persistence can be an indicator of college readiness (Chen & Carroll, 2005; Karp & Hughes, 2008b).

Despite the behavior's potential association with college readiness, it is interesting to note that Abdi (a first gen) actively avoids self awareness / knowing himself. He answers in the following way when I ask him if he would have handled a difficult situation with a professor differently in hindsight:

> I'm just one of those people like I don't like regretting anything. I just feel like, you know, it happened and, you know, now move on. When do something wrong, I just think about how I shouldn't do it in the future. I don't usually go back and say: "why did I do this?" I don't like to really like, I don't like to admit that I was a wrong. I know. Let's move on and think about the future.

In another story in which he admits to missing a lab session of his college biology course, Abdi reiterates that he did not like to "go back to stuff" (i.e., correct his mistake) because it "hurt [his] mind."

Build Self-Reliance. All of the students directly or indirectly tal about ways in which they are self-reliant. For instance, Mariama (a first gen) captures what self-reliance means to her when she says: "Ultimately it's my grade, you know. Whether you come to class or you're not going to class doesn't affect the teacher. But I mean, it's a good feeling to know that you're working hard." To support this behavior, she borrows strategies from her other college ready capacities. That is, she sets target grades and a target GPA that she hopes to earn in a given semester, which are goal setting strategies; and she tracks her own academic progress, which is a way by which she knows herself as a student.

However, Mariama and many of the others talk more about *being* self-reliant than *building* self-reliance, which instead is what Selma (a non-first gen) does. Selma builds self-reliance by recognizing her accomplishments following challenges. Generally, she feels self-reliant by having advanced through and completing the County program. She says that "I guess it's kind of just realizing that like I've made it through: Gone through an experience that not

many students have gone through. And I feel like my course [of study at County] is more rigorous and more like independent than other students." She elaborates that both having been soft skill credentialed and earning good grades at both the County and college levels gives her "self confidence in myself that, you know like, I can do this. And like I have the skills that I need."

Selma's strategies for earning self-reliance are not limited to having straightforward academic success in the ECD program. For instance, her BASE advisor notes that Selma is "a young woman who grew in a lot of confidence during the time that she was at our school. I think it probably stretched her in terms of confidence" by doing things like speaking in front of 200 people at the ECD's open house invitational for prospective students and parents. The BASE advisor also talks about one incident in which Selma built self-reliance after first struggling in her college chemistry class:

> [W]hen you really struggle with something and then you get it, there's something that feels, I don't know, really 'earned' about that. And I think for her to--this may not be accurate--but it may have been the first time that she ever faced that wall, you know…. I think that was a big moment for [Selma] when she experienced it. I think for her to see herself be able to work through something that she felt was hopeless you know. For a while she was like: "I can't do this class. I want to drop it. I'm going to fail. It's going to ruin my life." And to go from that to being successful. It wasn't easy, it wasn't fun, but she was successful. And I think I mean that's, I think that while those moments are especially painful for our stronger students who hit those walls, I think those are important moments for them. Because they see themselves successful at something they thought they couldn't be successful at. And then they apply those skills to the next situation so hopefully

In this story, the BASE advisor describes how Selma comes away with not only an attitude of self-reliance but also the strategy of recognizing success, and what she does to be successful, under challenging circumstances. Selma says that she similarly earned confidence and worked past a challenge when she was not admitted to her first-choice four-year university after graduating from County. She says that: "Well when I didn't didn't get into the school that I wanted, it didn't prevent me from going forward" by finding other ways to gain admission.

The behavior of building self-reliance that Selma describes mirrors what the college readiness literature calls "self-efficacy." Kitsantas et al. (2008) defines self-efficacy as a student's belief that she is capable of accomplishing a task under certain conditions, and they find that self-efficacy has the power to affect postsecondary student academic performance,

including GPA, over and above the affect of high school student achievement. Thus, this is evidence that building self-reliance as Selma defines can be a college ready capacity.

An example from Selma's case further connects her self-reliance / self-efficacy behavior with college readiness. She credits the sense of self-efficacy that she derives from having passed County's courses with helping her to succeed in college courses:

> [I]t was like: "oh, I've done more work than that [in my County classes]." So you know, that was kind of a relief for all of us I think. Because like in my English classes we would write like 6-page essays, 10-page essays, and stuff like that in my [County] class, right. And then when I moved on the college English, it wasn't as hard as my [County] class, so I kind of had more confidence. And like I didn't feel like I was like really behind or like this was something that I couldn't keep up with.

College course completion is an indicator of college readiness (Chen & Carroll, 2005).

Learning Techniques. Summarized in Table 4.4, the students indicate that they mobilize the following learning techniques: managing their time, attending, organizing and preparing, and asking peers for help.

Table 4.4

Students' Conception of Capacities Related to Managing Their Learning Techniques

BEHAVIORS & ATTITUDES	STRATEGIES	COLLEGE READINESS INDICATORS
Manage your time (Time management)	• Prioritize academic endeavors (2) • Designate a specific daily study time and weekly study days (2) • Keep and follow a record of your schedule in a planner (3) • Get ahead on upcoming tasks during unscheduled time (4) • Fulfill tasks well before their deadlines (2)	Course completion Academic integration
Attend (Time management)	• Be physically present – come on time, take infrequent breaks, stay until the end (5) • Be mentally present – participate in discussions & activities, ask & answer questions (5) • Be atten*tive* – Sit up & in front, listen, avoid distractions (3) • "Have a good breakfast" and "get enough sleep" (2) • Let teachers know ahead of tardiness or absences and follow up afterward (2)	Course completion Academic integration County soft skill credential
Organize and prepare (Independent learning)	• Come to class with tools like notebooks, binders, writing implements, books, planner (4) • Develop and use a note taking method (3) • Keep notes, tools, and other class materials in separate, designated locations (2) • Come to class having read and with questions about that lesson's content (3)	County soft skill credential
Ask peers for help (Collaborative learning)	• Develop and utilize a peer network (in-person and via communication technology) for checking understanding of course material (2) • Prior to and following class absences, ask peers for notes, classwork, and assignments (2)	Course grades Academic integration

KEY:
Bold text = Evidence from case suggested that student behaviors & attitudes were college ready
(Parenthetical gray text) = Comparable skill that literature associated with college readiness
(#) = Number of participating students who named a given strategy

Manage Your Time. Multiple students tell me that they focus their time management strategies on prioritizing academic endeavors, which primarily means balancing academics with other types of activities. Abdi (a first gen) talks about an ongoing challenge to balance athletics with school. He exemplifies this challenge by recalling his first semester at County:

> During the first two months of being at [County], I didn't do good in my classes. I had to quit the soccer team, and everything started getting better. That just taught me that, you know, you always have to have extra time in your schedule just in case something happens, you know. Don't fill up your schedule.

As he alludes, this challenge teaches him that he needs to "take his time" doing coursework rather than fitting it in around athletics. In contrast, Selma (a non-first gen) claims to have had more success prioritizing academics, saying that she knows to put them first by in part not feeling obligated to join a prior extracurricular activity for a second year in a row.

Academics take priority in the students' second strategy for managing their time. Namely, a few say that they designate a specific daily study time and weekly study days. For instance, Abdi contrasts early attempts to mobilize this strategy with his later success at doing so: "When I would wake up, I usually had free time, but I would go to YouTube and stuff, and I would do my homework right at school." Later in the program, he says: "Like now, everything is changed. I go to sleep around 10 or 9, or sometimes 11 depending in the homework. I do my homework stuff, and then I go to sleep." He also told me that he cut the distracting media consumption habit from his schedule.

One of the tools that student participants use to manage their time is a planner. For instance, Rubie (a non-first gen) states:

> Because you need to like remember dates and like when your homework is due. That's like the best way to do it. I use my phone calendar now, and I've noticed that really helps me.

In addition to tracking assignments, she adds that she uses her planner to break up tasks and accommodate for last-minute obstacles:

> I use my planner to set myself reminders. Like set a certain day I might study you know. Like for example if it's like three days before something is due or something like that, I say: "you know you have three days left." I kind of plan it out. Like if you don't want to do everything at once because you're going to be busy or, you know, you just can't sit there and do work. Maybe you plan it out during the week like maybe: "OK, I'll do the 1st paragraph of this paper today, then you know throughout the week I'll do more." If you just saw those [interim deadlines] you don't get so overwhelmed.

She notes that tracking and responding to due dates created success with getting her tasks done and reducing her stress.

In that last quote, Rubie refers to two time management strategies that she and others put into practice: getting ahead and not procrastinating. For Abdi, getting ahead means taking steps toward completing an upcoming task during unscheduled time in between activities, in part by having his schoolwork tools (e.g., laptop) available. Selma uses unscheduled time to get ahead in different way. She gives herself time to engage in self-development beyond her academic endeavors. She recalls:

> What I really liked about it [having a college-style schedule that I helped to pick] is that it's given me time to do what I want to do like in my free time giving me more opportunity to like volunteer. I used to volunteer at the V.A. I'm more active in like my religious community, you know. I can do more of my own stuff. And I feel like that's kind of what being a college student is. It's not just going to class every day. It's also having time for other things that you can improve yourself and become more independent.

One strategy that Rubie, Abdi, and Selma agree on is avoiding procrastination by fulfilling tasks well before their deadlines and building in "extra time" to accommodate for unforeseen delays. Abdi recalls how procrastination hurts his peers' chances of getting soft skill credentialed:

> I learned that time is important. If you mess around with time, you won't go anywhere. Because I know people who still take [ECD] classes all because they don't use their time well. They go play, or do something. Or they do the least they can or, you know, they don't do their homework until the last second, or they play some games. I mean it was all about the timing.

Rubie echoes that sentiment. She says that, when she procrastinates in completing a school project, she realizes "it's not going to be your best work."

The strategies that the students name fit the college readiness literature's definition of a skill it also labels as "time management." That scholarship states that time management involves deciding how to spend one's time as well as employing the mechanics of making lists, planning, & scheduling (Byrd & MacDonald, 2005; Collier & Morgan, 2008; Hoff Macan et al., 1990). Research finds that postsecondary students who are capable at managing their time increase their academic performance and decrease both their stress and the feeling that they do not know what they are doing (Hoff Macan et al., 1990; Kitsantas et al., 2008). The parallels between the students' definition of time management and how that behavior is discussed in the literature allude that the participants' capacity is a form of college readiness.

Abdi provides examples from his case in which he time management strategies appear to be forms of college readiness. During one condensed spring session (i.e., 6-week course), he put into practice some the strategies noted earlier in order to keep up with a heavy essay workload in a college English class. He would fit work in among other activities like sports practice and work: "I always had to find the time.… I would be eating and like there was food all over my laptop." He would get ahead when he could and leave extra time close to deadlines: "You know, if you are the person, like the type of person to wait like until the last second, that wouldn't work. …[because] anything can happen." As a consequence, Abdi feels he became more effective at fitting the normative pace of college work:

> Now it's like someone tells me: 'hey, you have an essay due tomorrow', it's really nothing to me. For a while before, I would think like: 'I don't have enough time.' But now I just think it kind of trained me."

By adjusting to and adopting this norm, Abdi becomes more academically integrated into the community college: an indicator of college readiness (Mamiseishvili, 2012; Pike & Kuh, 2005). Moreover, he says that his time management behavior helped him to complete (i.e., avoid failing) the condensed college English course, another indicator of college readiness.

Attend. All five of the students agree that physically attending class is an important strategy to put into practice. Physical attendance for Selma (a non-first gen) means "showing up on time [and] not leaving too early," and for Mariama (a first gen) it means minimizing the number of times she leave once she is in class. Selma emphasizes why being in class is so important: "So if you show up late and you miss like half the material it's like that could be on the test and you don't know that. How are you going to succeed in that class if you're never there?"

All five students also agree that mentally attending is equally important. Rubie (a non-first gen) speaks for many of them when she says that mental attendance involves "listening to the teacher"; "making sure you're paying attention, you're taking notes"; and "raising your hands and like answering the question and commenting on what the teacher's talking about." Steven (a first gen) adds that he uses mentally attentive strategies like completing in-class assignments, avoiding side conversations, and being an "active listener" by:

> Sitting in the front of the class and showing good body language: active listening skills. …just by you doing it regularly, you're gaining information that much more. And even though it might not be much, by you nodding your head at what you get and then showing facial expressions when you don't understand something, it helps the teachers know what they need to focus more on and help yourself categorize what you know, what you don't know, what you need to spend more and more time learning from, what you don't need a lot of time learning. I have I think, you know, and because I've done that not just in my high school classes and but also in my college classes.

Abdi, another first gen, seconds the need to avoid in-class distraction. He gives one example of a thought that can take his mind off class: "I mean, you know, if you're in class and thinking about what you are going to eat for lunch, that's not attending a class mentally." He adds that he finds it important to also avoid turning to technology during class time:

> I mean another important thing is paying attention in class. I mean what we were taught was not to use our phones in class, not to use the laptop, you know: Anything that's going to distract you. And I think that's helpful for kids. Like I got used to it: putting my

> phone away, like it's nothing. But I mean I see other people just checking their phone every 5 seconds, every 10 seconds.

Selma rounds out the mental attendance strategies by sharing how she supports that practice: "with mental attendance, just get enough sleep the night before. Have a good breakfast so you're not falling asleep during class." Mariama seconds that those are both strategies that she mobilizes in order to avoid "zoning out."

When an absence or tardiness does happen, the students try to let their teachers know ahead of time and follow up afterward. As Rubie puts it: "And if you can't make it, you make sure you talk to the instructor or you have an emergency contact that you can ask for the notes."

While the college readiness literature that I review does not address attendance, the way the students talk that behavior make it seem like a form of time management, which the literature does discuss. For instance, Abdi talks about learning to "wake up an hour earlier" as "something that I just have to do" in order to attend school on time. Thus, the students' attendance behaviors may be college ready because they contribute to time management, which the literature does associate with readiness.

More directly though, Steven and Abdi provide examples from their cases in which they associate their attendance behaviors with indicators of college readiness. Steven suggests such a link, both when he successfully attends and when he does not. He recalls that he "messed up a lot" when it came to class attendance, leading to him failing and having to repeat courses. His attendance behaviors thus appear to affect his class completion, one traditional measure of college readiness. As a later student, he recounts attending class regularly and mobilizing strategies like active listening and avoiding side conversations. Steven links these versions of his attendance practices to another measure of college readiness: engaging with college faculty, which is a sign of academic integration (Pike & Kuh, 2005). Abdi's BASE advisor reports that he started his career at County attending well by "participating in class", "asking questions [and] having mental attendance." She notes that these behaviors were ones that permitted for him to be soft skill credentialed as an indicator "that he was college ready."

Organize and Prepare. The students argue that college readiness includes coming to class organized and prepared to learn. Four of them state that doing so fundamentally involves bringing tools like notebooks, binders, writing implements, books, and a schedule planner. Abdi (a first gen) summarizes this strategy:

> Always be ready. Get your notes ready. Get the book ready. Get your pencil ready. I mean it's not like high school where you can just raise your hand and ask for something. There are like 100 students next to you and there's a lecture going on. Like especially in the lecture labs, there's a lot of people. So you can't leave the class and go get a pencil. You've always got to be ready with your stuff. Get your planner ready.

Rubie (a non-first gen) further suggests that, for her, not only having those tools but keeping them organized is helpful:

> You know for classes, have a spot for everything like in your binder: you know, notes section, homework section, handouts section. It helps because, I know sometimes like I used to lose copies of things in my like [County] classes, and like my teachers like sometimes they have extra copies, so they would give it to me. But like if you're in a college class, like I don't think the teacher makes extra; they just make enough for the class.

She adds that her time management and organization behaviors work together in that she chooses "one day out of the week to organize my stuff because I know like it starts to get cluttered."

Another strategy that the students mobilize in order to be prepared is to come to class having read and with questions about that lesson's content. Abdi says that he facilitates this strategy by accessing course content via online systems:

> OK so before every class, I go online to Blackboard to look over what we're going to cover because every teacher posts everything ahead: what we're going to learn today, links that will be helpful. So I go the look of what we're going to learn today so I can be able to participate. Maybe ask a question or understand more. I go over the links and notes they are going to go over. I mean you don't have to fully understand. You can skim through just to have an idea even to talk about, so that's also part of.

He emphasizes that, for him, key parts of this strategy are learning "new vocab words" from the posted content and accessing course materials like the teachers' PowerPoints and notes as well as practice exams and study guides.

One strategy that the students use to be organized and prepared during class is developing and utilizing a note taking method. Mariama (a first gen) suggests:

> Note taking: definitely find a technique.… I know people who write everything, literally everything: the whole page is one slide. And I'm like: "don't do that, take the main point of your teacher." I actually had to listen to what the teacher is saying because there's a lot of stuff that's on a slide or whatever that they're presenting it's not even necessary. But they say something: that's most important. So find a note taking technique. Pay attention to what the teacher puts on the board. … So just find a technique that works for you. Even if you don't write fast, bring the laptop with you, you know.

Abdi says that he uses many of those same strategies, and he adds that he makes his note taking even more efficient by both taking notes on printouts of teachers' PowerPoints posted online and

developing a personal shorthand. Rubie (a non-first gen) states that she sometimes takes notes by "maybe like tak[ing] a picture of like [the professor's] notes after she [is[done writing them on the board." Once she has her notes, Rubie advises that they are beneficial to helping her study only when they are organized:

> Yeah. And also like it's good to organize your notes so that like you can find everything when you're studying. Like I remember I had like a notebook with like multiple subjects in one notebook. And I would be flipping you know back and forth to find the notes for whatever class and it just wasn't, it wasn't very effective.

Steven (a first gen) says that he organizes his notes in part by rewriting them for neatness afterward.

The students' strategies for putting their organization and preparation behaviors into practice mirror how the college readiness literature talks about the skill of "independent learning." The scholarship states that independent learning techniques include note taking, using technology to study, and employing methods that benefit memorization and recall (Pascarella et al., 2003; Pike & Kuh, 2005; Reid & Moore, 2008; Stebleton & Soria, 2012). The literature then associates independent learning, as a parallel of organizing and preparing, with indicators of college readiness. Nonis and Hudson (2010) find that independent study techniques like the ability to concentrate and having a good set of notes might positively affect student academic performance, and these techniques may enhance the positive effect that study time has on performance.

Within Abdi's case, his BASE advisor states that his organizing and preparing behavior shows "that he was college ready." She says that County teachers "mentioned in the past when he was in our classes that Abdi has demonstrated good mental attendance and preparation so far. So that's just evidence that that is something that he took seriously: knowing that he has to be prepared for class." Specifically, she recalls being told that "he was turning in his homework assignments." Because County teachers noted that he mobilized these strategies, they soft skill credentialed him, which is County's own indicator of college readiness.

Ask Peers for Help. Some of the students supplement their independent learning strategies by also reaching out to classmates to help them learn. Mariama (a first gen) says that she utilizes a peer network, both in-person and via communication technology, to check her understanding of course material. As she puts it: "I had a lot of students in class that I was

friends with. So we would always text: 'what is this about?' So like that helped." She adds that peer support even benefits her willingness to participate in class:

> I'll try to have in class a buddy because, you know, it helps me really get out of my shell more and talk more, you know. Because when you're first starting class, it's kind of scary. Nobody knows anybody you know and nobody else has talked to anybody.

In this sense, Mariama habit of asking for peer help bolsters her attendance behavior. Steven (a first gen) and Selma (a non-first gen) say that a peer network specifically allows them to ask classmates for notes, classwork, and assignments prior to and following class absences.

The college readiness literature defines "collaborative learning" in many of the same ways that the students talk about asking peers for help. It directly states that collaborative learning might entail studying with others and peer-to-peer teaching (Boroch & Hope, 2009; Pike & Kuh, 2005; Sawyer & Berson, 2004). Research indicates that collaborative learning through peers, much as the students describe it, is positively associated with student GPA (Nuñez et al., 1998).

Steven provides an example from his case in which him asking peers for help creates conditions that indicate college readiness. Namely, he academically integrates into the program environment by having course-related interactions with peers beyond the classroom (e.g., Nuñez et al., 1998). As he describes:

> Use your peers to help you out because they really do push you. Do not ask the teacher for made-up work; do not ask your teacher what we did in class; ask your peers. That is probably is something that is very big and very useful that County teaches you that you carry over to your college classes, you know. It helps because your peers can give you a different look at the material. Maybe get you to understand the material a little bit differently; come at it differently than the teacher might. That's also something that helps make students more successful.

In this quote, Steven notes that these peer interactions may indirectly benefit his course performance by allowing him to gain new perspectives on academic content that may better help him to learn that content.

Selma (a non-first gen) adds a second example that substantiates that the above strategies are forms of college readiness. She indirectly credits asking peers for help with benefiting her academic performance: "Like they're the ones I'm going to study with today. They'll help me understand something if I don't understand it, and I do the same for them."

Capacities Related to College Knowledge

Noncognitive capacities dominate what the students believe are important behaviors, attitudes, and strategies, and many of those capacities seem to contribute to the students being college ready. However, the other categories of practice in the framework also appear in my discussions with and about the students' practices. To start, the students put into practice college knowledge as summarized in Table 4.5. Namely, they navigate community college systems, appreciate personal identity, and are part of a learning culture.

Table 4.5

Students' Conception of Capacities Related to College Knowledge

BEHAVIORS & ATTITUDES	STRATEGIES	COLLEGE READINESS INDICATORS
Navigate college systems (Understand postsecondary norms)	• Identify and access writing and content-specific tutoring centers (4) • Locate and access campus facilities such as computer labs & libraries (3) • Find, pick, and sign up for courses that fulfill your degree pathway (2)	Academic integration
Appreciate personal identity (Acclimatize to postsecondary culture)	• Engage and explore your interests and components of your identity (1) • Be open to learning from others with a wide range of identities (2)	Social integration
Be part of a learning culture (Acclimatize to postsecondary culture)	• Foster learning and self improvement as social norms (1) • Recognize that you are responsible for your academic performance (1)	

KEY:
Bold text = Evidence from case suggested that student behaviors & attitudes were college ready
(Parenthetical gray text) = Comparable skill that literature associated with college readiness
(#) = Number of participating students who named a given strategy

Navigate College Systems. The primary ways in which the students exercise their college knowledge is by taking advantage of the support resources that the community college offers. Most of the students do so by identifying and accessing the community college writing center and content-specific tutoring centers. For example, Abdi tells me that he finds the writing center to be particularly useful: "There's a place we have here, it's called the writing center. And they'll review your essays. And I find that they find a lot of mistakes and that actually helps."

Steven says that he utilizes the math tutoring center in order to "get support [with] curriculum content."

Another of the students' strategies for navigating the community college systems is locating and accessing campus facilities such as computer labs and libraries. Steven says that he knows to employ the library databases for research. Selma (a non-first gen) adds that she mobilizes the simple but fundamental strategy of physically locating her classes on campus.

Beyond knowing how to use the community college resources, a few students point out the need to find, pick, and sign up for courses that fulfill their degree pathways. Selma exemplifies this strategy when she manages her courses in order to reach her goals of attending a biomedical engineering program at a four-year university and then attending medical school. By "know[ing] where [she is] headed," Selma correspondingly designs her community college degree pathway, learns how to sign up for the associated courses, and identifies and completes course prerequisites like placement exams.

The college readiness literature encapsulates some of the students' strategies within the skill of "understanding postsecondary norms." Namely, scholars state that a part of this skill is comprehending and navigating the bureaucratic systems of postsecondary institutions (Collier & Morgan, 2008; Engle et al., 2006). The students describe strategies that fit this definition. Thus, their habit of navigating the community college may be college ready because researchers associate "understanding postsecondary norms" with academic integration (Pascarella et al., 2004; Pike & Kuh, 2005).

Selma (a non-first gen) presents further evidence from her case that I could associate with academic integration. Selma appears at ease in a postsecondary environment. For instance, she finds the idea of picking and scheduling coursework at a four-year institution "kind of easier for me just because I've been doing that for the past four years" at County. She also finds it very natural to use college-level resources, like the writing center, recalling that: "I found [the writing center] to be very helpful because I actually went to them to, like, look over my essays before I applied to colleges."

Appreciate Personal Identity. It is important to a few students that they learn from the range of personal identities represented at County and the community college. Mariama (a first gen) tells me that she grows because she learns from those whose identities differ from hers:

> Seeing things in a bigger light, that started with [coming to County]. I was very closed minded before I got to [County]. Not so much that they taught me, but because we're on the college campus, I stopped looking at myself as a high school student. When you're around so many different people: some of whom don't look like you, some of whom don't think like you, you're just learning so many things. Like you can sit down with someone for like ten, fifteen minutes, you just learn so much, you know. The experience started with [County], and being exposed to new things.

In particular, Mariama feels that she benefits from the array of perspectives present in her college courses like political science and African American literature. Selma (a non-first gen) relays a similar story from her college psychology course. She recalls that the class once had a discussion about the relativeness of child discipline and how what seems "permissive, authoritarian… [or even] too strict or abusive" depends in part upon one's culture. She says that exposure to other identities like this leads her to try to engage with others without judgment: "So you have to like kind of figure out how to deal with that. See where they're coming from, what they're trying to tell you. Just understanding other people."

Moreover, Selma believes that being at County's affiliated college is a time not only to appreciate a community of personal identities but also to explore her own identities. In her words:

> And I feel like when you go off to college, you said have some sort of identity of like who you are and what you want to do for this world. And I feel like that's what college really is all about, is that you go there to learn to have some kind of impact on society.

In order to support such behaviors, Selma mobilizes strategies like joining student associations or engaging with classmates, particularly when either shares her interests or sense of identity. As she states: "And you know I think the great thing about clubs is that you all want to be a part of it. This is all something that you're interested in. You can really be yourself when you're in it." One specific example for Selma is her having joined a music group to foster the part of her that she considers to be a piano player: a "trait that I have that I feel like is… I wouldn't be myself without it."

The openness to diversity that Mariama and Selma embrace is a component of a skill that the college readiness literature refers to as "acclimatizing to postsecondary culture" (Nuñez et al., 1998; Pascarella et al., 2004). Researchers consider such acclimatization, particularly when it manifests in the ways that Mariama and Selma engage in conversations and activities that explored issues of identity, signals social integration: an indicator of college readiness (Mamiseishvili, 2012; Pike & Kuh, 2005).

Selma's case includes evidence that her appreciation of personal identity is college ready. By exploring issues of identity in such student organizations as the music club, yearbook, and student council, she has success with socially integrating into the community college, which is a sign of college readiness (Mamiseishvili, 2012).

Be Part of a Learning Culture. A few participants talk about how County and the community college are cultures focused on learning, and the students share the strategies they put into practice in order to contribute to that culture. Selma describes the "maturity" that she embodies as a member of that culture:

> When I first came here, I was 14; and I was going to be in an environment with like 20 year olds. There are people as old as my mom and dad, you know, even older. But everybody's here to learn. No one really cares about what you're wearing, what kind of music you listen to. We're all mature and we're here because we all want to reach a certain goal. …When you have a lot of work to do, you don't really want to focus on other people. You're more focused on yourself and improving yourself. Here it isn't about everybody else, you know. I mean just do your thing.

She also talks about how she fits the school culture by avoiding negative social behaviors:

> I feel like the biggest social problem that [County] doesn't have that other high schools have is bullying. And I'm not sure if I've talked about this before, but I think [County] kind of provides an environment where no one really cares what you do or what you think or how you look. Because everybody is there to learn.

In these ways, the school culture offers Selma behavioral cues to which she aspires.

For Abdi (a first gen), the way that he tries to embody the school culture is accepting personal responsibility for his own academic performance:

> Every professor is different, just like every student is different. You're never going to find a professor that is perfect. It's just like the way people are, you know. There are some professors who explain good; some Professor you won't get along. But that's your responsibility to you know find a way to make it right because it's your grade, your G.P.A. The teacher can give you an 'E' or 'D'; he wouldn't lose anything. It's you who are losing the money [by failing a course you paid for]. So you need to figure out a way of solving it. It's all on you, you know.

He adds that: "Basically it's not just the professor who is teaching you. You're teaching yourself, too. So it's more of your choice." In order to enact these attitudes, Abdi mobilizes strategies like tracking his own academic performance and supplementing his learning with information online or help from peers.

Alongside appreciating personal identity, being part of a learning culture is another behavior that could fit within the umbrella of acclimatizing to postsecondary culture, as

discussed in the college readiness literature. Some scholars examine acclimatization to an academic culture (J. S. Smith & Wertlieb, 2005), which Selma exemplifies above. Other scholars examine the culture of independence that is common at college (Stephens, Fryberg, et al., 2012; Stephens, Townsend, et al., 2012), which Abdi exemplifies above. This scholarship alludes that these strategies for being part of a learning culture has implications for indicators of college readiness like grades and other measures of academic performance.

Capacities Related to Academics

Alongside the other categories, the students put into practice the academic behaviors and attitudes summarized in Table 4.6. Namely, they think critically, write well, and know core content.

Table 4.6

Students' Conception of Capacities Related to Academics

BEHAVIORS & ATTITUDES	STRATEGIES	COLLEGE READINESS INDICATORS
Think critically (Cognitive strategy)	• Seek out, listen to, and be "open minded" to varying viewpoints (2) • Recognize and reexamine your perspective or values (2) • Consider that one problem has multiple ways of solving it and multiple outcomes (2) • Employ the "right" tool for addressing a problem (1) • "Talk to the text" – "analyze the text, ask questions, make connections" (1)	Course grades Social integration
Write well (Content-related technical skill)	• Use proper grammar and spelling (2) • Understand your audience and the purpose of your writing across various writing formats (1)	Course grades Admission to four-year institutions
Know core content (Content knowledge)	• Know the core concepts of English, math, and science (3) • Know the vocabulary of those subject areas (1)	Course grades

KEY:
Bold text = Evidence from case suggested that student behaviors & attitudes were college ready
(Parenthetical gray text) = Comparable skill that literature associated with college readiness
(#) = Number of participating students who named a given strategy

Think Critically. The students' critical thinking strategies range from ways to consider new ideas to ways to analyze and absorb information. Steven (a first gen) and Selma (a non-first gen) speak about all of these strategies, and they first agree that it is important for them to seek

out, listen to, and be "open minded" to varying viewpoints. Steven reveals how he puts being open minded into action in his classes:

> Some of the things that critical thinking teaches you, it helps you be more of a kind person, I believe. In class when I see my classmates jumping on another student for whatever it was that they said or whatever they believe, I do my best to immediately speak up: "This might not be where you come from, but I understand."

Selma adds that, for her, part of being a well-informed critical thinker means considering varying viewpoints as well as recognizing commonalities between viewpoints. During travels with her family to visit Palestinian relatives in Israel, she reports exploring both perspectives on the conflict between those two peoples. She says she came away with a number of lessons, the first of which is: "I think that if everybody just takes some time to really listen to each other it would be a much better." She also believes:

> I think what people don't realize is that with politics: I mean, yeah, there are two different sides and they have like different methods. But at the end of the day, they both want what's best for this country, so that's kind of why I'm so insistent on looking at both sides of like any type of conflict or dispute.

Selma adds that her critical thinking involves not only understanding opposing sides but also seeking mutually beneficial solutions for those sides.

A complimentary strategy that Selma and Steven mobilize is recognizing and reexamining their own perspectives and values. Selma recognizes that her preexisting viewpoint can bias her receptivity to new ideas:

> It's definitely taught me to not just look at a situation so one sidedly and kind of see what others have to say about it because a lot of the times they will be making very valid points that you shouldn't just disregard. And before that, I kind of was like this is what I think; no one's going to change it, you know. … But yeah, the most important thing I learned was that you need to not be so focused on a set of values, and you kind of have to take from those around you.

Steven succinctly agrees: "Critical thinking [is] about seeing the arguments and all of the flaws," even his own.

For Selma, critical thinking is not just a behavior that she uses with controversial issues. She also talks about critically analyzing problems. One strategy (that Steven also mentions) is considering that one problem has multiple ways of solving it and multiple outcomes. For example, she tells me:

> In physics I find myself really, it's really conceptual. So I mean there's not one certain way to do a problem like there is in algebra, you know. And I have, I think it's really, it's

> a challenging class but like I enjoy it; and I feel like I kind of began to look at like different problems and situations differently to find the solution.

Specifically, this means employing multiple tools to address a problem, which is another of her critical thinking strategies:

> I kind of like got the thinking process down: [the physics professor] like gave us a list of like of what a physicist does before they go into solving a problem. [For example,] like draw the diagram, label you're knowns and unknowns, pick the right equation that you need to use, you know what I mean.

Selma adds that she tries to learn different forms of problem solving by experiencing subject areas outside of her degree pathway and new activities beyond her typical involvements.

Steven introduces one more strategy through which he puts his critical thinking behavior into practice. He says that, when he reads, he "talks to the text." That is, he "analyzes the text, asks questions, makes connections," often by "being able to take a pencil to whatever [he is] reading."

Critical thinking is one of the "cognitive strategies" that Conley (2011) includes in his model of academic college readiness. Conley (2003) and Pascarella et al. (2004) find, respectively, that students who mobilize cognitive strategies like critical thinking are better equipped to meet the expectations of college faculty and perform well academically. Thus, Selma's and Steven's critical thinking behavior as they have defined it may be college ready.

Both students offer their own evidence that their critical thinking behaviors are college ready. Steven seems ready in college to build community with others who are not like him because he practices critical thinking. He states:

> I use critical thinking skills, you use critical thinking skills every single day, every single day. It helps, it makes you a better student and a better person, in general. Being able to look at a situation with not a closed mind; be able to look at an argument and see both sides. To do all of these things is very, very, very important to being people. It helps with our relationships, in our communities, and in school.

Building community with others with differing ideas and backgrounds may be another form of socially integrating into college and thus an indicator of college readiness (Pascarella et al., 2004). Selma alludes that the critical analysis strategies she employs in her college physics course benefits her academic performance:

> I feel like that kind of ability to [problem solve] kind of broadened my mind to have more like spatial knowledge and stuff like that definitely helped me with like the creative part of my brain, you know. And so yeah I mean it's just helped me work different parts of

> my brain that I haven't worked before, and I feel like that's really important when you go off to college.

Selma also says more directly that this improvement in her cognition benefits her course grades in that she sometimes goes from performing "horribly" on her first exam to "doing much better" in the course overall.

Write Well. Abdi (a first gen) advocates that good writing means using proper grammar and spelling: "I've noticed that English teachers, and my friends told me, that spelling and like little grammar stuff: you lose a lot of points for that stuff because it's college level." He also suggests that it is important for him to "catch little mistakes [that] can be distracting to the reader."

While Selma agrees that Abdi's strategy is important to writing well, she also introduces the idea that strong writing means that she understands her audience and the purpose of her writing. For example, she is cognizant of these aspects when writing to advocate for herself with her top-choice university to which she is applying:

> Yes, and I talked about like growing up in [in the city next to the university], and [as a result] that I was able to see being in that kind of environment, around the school and university. I was able to see like the impact they've had on [the city in which the university was located] and the world and all of the research they've done. All the work they've done and everything that they've accomplished. I was able to kind of be a part of that because I was part of the community. And I kind of talked about how I would like to be more part of that.

Within the classroom, Selma uses the strategy of trying out many forms of writing. Within a semester-long project in her County English class, she chose to write about the story of Jack the Ripper using various genres that could describe a crime scene investigation (e.g., letters from victims, criminal profiler reports). She relished in this as an opportunity to expand her writing skills beyond those needed for composing a research paper.

Standards set for state curricula (e.g., Common Core State Standards Initiative, 2017) or by postsecondary faculty (e.g., Conley, 2003) establish that college students need a variety of "content-related technical skills" such as strong writing. Conley (2003) argues that students with such behaviors have the "tools" they need to successfully engage in "thoughtful" and "increasingly complex" postsecondary study (pp. 17-18, 29). As one of those content-related technical skills, the writing behavior that the students define could be considered college ready.

Selma provides evidence form her case that the above strategies for writing contribute to her college readiness. She credits them with helping her to craft her college admission

applications. Scholars suggest that navigating that processes is an indicator of college readiness (Barnett, 2016). In terms of the strength of her application essays, she notes that: "I had my English teacher look it over and he didn't have very much to say about it. Like he didn't have that much suggestions, you know, for me because everything was well written." In terms of the task of writing emails to decision makers at her top-choice institution—which she recognizes as "a way to present yourself to someone who's never met you before"—she indicates that "it didn't feel like it was too difficult because I had good writing skills."

Abdi offers further proof of that the above writing strategies equate to college readiness. He shares one story in which his attention to grammar and spelling lead to positive academic performance in a college class:

> Like I remember in the [college] English [course], like my first couple essays I got a 100, 100. After that, when I turned in later essays, she would like just skim through it because she… the teacher has a little credibility in me.

In this memory, Abdi suggests that his college English professor judges that he wrote at a college level.

Know Core Content. While mentioned by others, Abdi speaks most directly about the necessity of knowing core content to be college ready. Abdi and his BASE advisor note that important core content comes from subject areas like English, math, and science. Abdi specifies that math knowledge up through geometry is important. He also repeatedly says that knowing the vocabulary common to the above subject areas is a necessary part of being in college:

> I used to think that science was English, but it's not English. It's a whole different language. Basically the vocabulary is very different…. [Y]ou need to know the main important thing is the vocabulary, the words. And once you know most of the words, everything is easy for you. It's basically saying like you have a test in a language that you don't know about things that you know right. You know the topic that they're asking about, but they're asking in a different language. That's basically what it is: once you understand the vocabulary, you're set to go.

Abdi says that another of his strategies is completing the readings about core content in order to learn subject knowledge.

Abdi's definition of knowing core content parallels that set out by the college readiness literature, which calls on students to have foundational "content knowledge" in the subjects of English, math, natural sciences, social sciences, second languages, and the arts (Common Core State Standards Initiative, 2017; Conley, 2003). Like Abdi, the scholarship includes the strategy of knowing the key terminology used in each subject (Byrd & MacDonald, 2005). Students who

develop content knowledge may do better in college. Those with advanced math knowledge, for example, are more likely to enroll and persist in a postsecondary institution (Choy, 2001). Because Abdi talks about developing knowledge in the same content areas advocated by the literature, he is likely depicting a college ready behavior.

There is evidence from the case to connect the strategies he describes with college readiness. Abdi's BASE advisor reveals that, alongside the soft skill credential, student grades in core content courses are County's other measure for deciding if students are college ready. She confirms that Abdi "received A's and high B's in his core classes, which were critical reading, English, science and geometry. [So] his academic grades good, … [and] indicated that he was college ready." Thus, Abdi shows that having the above forms of core content knowledge could be associated with college readiness in two ways: by enabling him to both have good grades and meet County's benchmark of academic readiness for college course-taking.

Comparing the First Gens' Conception of College Ready Capacities to the Framework

In the preceding review, Mariama, Abdi, and Steven, the three first gens, discuss the capacities that they (a) believe are important to put into practice in order to be ready for college and (b) cite as having made a difference in their college success. With little exception, Selma and Rubie, the two non-first gens, talk about the same capacities that the three first gens do. Thus, the three first gens' conception of college readiness is representative of what all five students discuss.

In Table 4.7, I compare that conception to the list of capacities that appear in the initial framework. The table repeats from Chapter 2 (Table 2.1) the framework's list of capacities: that is, the ones that scholars say constitute college readiness. The table then contains the list of matching behaviors and attitudes that the first gens identify in this chapter as being important to college readiness. For each, there is a statement summarizing the strategies that the students say support each capacity, as detailed in Tables 4.3-4.6 above. In Table 4.7, I also repeat from Tables 4.3-4.6 the postsecondary measures that the students report that each capacity benefits.

Table 4.7

Mapping onto the Framework the Students' Conception of the Capacities Important to College Readiness

CAPACITIES IN LITERATURE	STUDENT CAPACITIES	IDENTIFIERS	REPORTED EFFECTS
Noncognitive			
Ownership of Learning			
Seek Help	Self-advocate	Proactively and professionally make time to meet with school personnel to get help. (Mariama, Abdi, Steven, Selma, Rubie)[a]	Course grades (Abdi)[b] County soft skill credential (Abdi, Rubie)
Seek Help	Build social capital	Build up school personnel's knowledge of you and get to know school personnel. (Mariama, Steven, Selma, Rubie)	Course grades (Selma) Admission to four-year institutions (Selma)
Set & Focus on Goals	Set goals	Explore and pursue your interests and values in order to find a career. (Abdi, Steven, Selma)	Degree attainment (Steven)
Set & Focus on Goals	Follow through	Set and take incremental steps and daily tasks to meet goals and honor commitments. (Mariama, Steven, Selma)	Course grades (Selma) Degree attainment (Steven)
Be Self-Aware	Know yourself as a student	Monitor your school performance and be aware of how you react to and respond to the school environment. (Mariama, Steven, Rubie)	Persistence (Steven)
Be Self-Efficacious	Build self-reliance	Seek out challenges, recognize successes, and learn from setbacks. (Mariama, Selma)	Course completion (Selma)
Learning Techniques			
Manage One's Time	Manage One's Time	Prioritize and set aside time for schoolwork, tracked in a scheduled calendar. (Abdi, Selma, Rubie)	Course completion (Abdi) Academic integration (Abdi)

CAPACITIES IN LITERATURE	STUDENT CAPACITIES	IDENTIFIERS	REPORTED EFFECTS
Manage One's Time	Attend	Be physically and mentally present and attentive. (Mariama, Abdi, Steven, Selma, Rubie)	Course completion (Steven) Academic integration (Steven) County soft skill credential (Abdi)
Learn Independently	Organize and prepare	Come to class with the tools, knowledge, and questions to enable note taking and engagement. (Mariama, Abdi, Steven, Rubie)	County soft skill credential (Abdi)
Learn Collaboratively	Ask peers for help	Develop and utilize a peer network for learning and compensating for class absences. (Mariama, Selma)	Course grades (Selma) Academic integration (Steven)
College Knowledge			
Accessing College			
Understand the Admission Process	- - -	- - -	- - -
Understand the Financial Aid Process	- - -	- - -	- - -
Navigating College			
Understand postsecondary norms	Navigate college systems	Identify, locate, and access college resources, and manage a course load toward a degree. (Abdi, Steven, Selma, Rubie)	Academic integration (Selma)
Acclimatize to postsecondary culture	Appreciate personal identity	Engage and explore your identity and the identities of a wide range of others. (Mariama, Selma)	Social integration (Selma)
Acclimatize to postsecondary culture	Be part of a learning culture	Foster learning and self improvement as norms for yourself and others. (Abdi, Selma)	
Academic			
Have Cognitive Strategies	Think critically	Be open minded to varying viewpoints, and use multiple approaches to problem solving. (Steven, Selma)	Course grades (Selma) Social integration (Steven)

CAPACITIES IN LITERATURE	STUDENT CAPACITIES	IDENTIFIERS	REPORTED EFFECTS
Have Content-Related Skills & Technical Knowledge	Write well	Write to your purpose and audience using proper grammar & spelling. (Abdi, Selma)	Course grades (Abdi) Admission to four-year institutions (Selma)
Have Content Knowledge	Know core content	Know the core concepts and vocabulary of English, math, and science. (Mariama, Abdi, Selma)	Course grades (Abdi)

NOTE: The table names the students who (a) contribute to identifying and defining each capacity and (b) report the listed effects of each capacity. The non-first gens' names (and any data attributable *only* to non-first gens) appear in gray text.

When comparing the first gens' list of college ready capacities to the list from the initial framework, I make four assertions. In one sense, the conception of college readiness in the first gens' stories parallels much of the conception in the initial framework, in so much as:

- The first gens mention all of the capacities associated with community college readiness on the original list, they mention two of the list's capacities associated with readiness at 4-year institutions, but they do not mention capacities related to accessing college.

In three other ways, the first gens' stories add detail beyond what appears in the framework's original list of capacities:

- The first gens discuss four capacities that are not in the initial framework;
- They give examples of what those capacities (i.e., behaviors and attitudes) can look like by detailing the strategies that they say are important to putting each into practice; and
- They share anecdotes in which many of their capacities benefit their success at the community college, thereby strengthening the argument that those capacities can be forms of readiness in that type of institution.

Below, I review the findings from the first gens' narratives that support each of these observations.

Parallels between the Framework and the First Gens' Conception of College Ready Practice

Assertion #1. *The capacities that Mariama, Abdi, and Steven mention mirror both the categories of college ready practice as well as the specific behaviors and attitudes that appear in the initial framework (with the exception of those related to accessing college), thereby echoing many of the capacities that earlier scholarship links with community college readiness in particular*.

I build the framework's conception of college readiness from scholarship situated mainly in community colleges, alongside additional literature from 4-year institutions that examine added skills of possible importance to first gens. Across both categories, those scholars contend

that college readiness entails having not only academic skills but also noncognitive capabilities and college knowledge (Annenberg Institute for School Reform et al., 2014; Conley, 2014; Nagaoka & Holsapple, 2017). The first gens in this study likewise report that behaviors and attitudes from all three of these categories are important to college readiness.

By underscoring much of the conception of readiness in the initial framework, Mariama, Abdi, and Steven discuss the importance of a number of specific behaviors and attitudes that match with ones that existing research links with community college readiness. To start, the first gens and the literature allude to the following noncognitive behaviors and attitudes, or something comparable, as being central to community college readiness. Both the students and the scholars talk about students taking ownership of their learning by self-advocating (Karp & Bork, 2014), setting goals (Karp, 2016), knowing themselves as students (Karp et al., 2012), and building self-reliance (Edmunds, Arshavsky, et al., 2017); and both mention learning techniques such as managing their time (Byrd & MacDonald, 2005) and asking peers for help (Deil-Amen, 2011b). Researchers of community colleges and the first gens recognize two similar ways of putting college knowledge into practice: navigating college systems (Karp et al., 2011) and appreciating personal identity (Karp & Bork, 2014). And the community college literature and the first gens identify two academic behaviors in common: write well (Edmunds, Arshavsky, et al., 2017) and know core content (Mokher et al., 2018).

The first gens also talk about two capacities that scholars suggest can be important to first gen students (broadly) who attend 4-year institutions. All three first gens in this study mention organizing and preparing, which the literature identifies as one noncognitive learning technique that can effect whether first gens rise to the challenge of college work (Reid & Moore, 2008). Steven also indicates that critical thinking is an important academic capacity, echoing findings that first gens more so than non-first gens need to work on developing that cognitive strategy (Pascarella et al., 2004; Pascarella et al., 2003).

The first gens do not discuss two capacities that research suggests that I include in the initial framework because they can, respectively, help students to enroll in (Plank & Jordan, 2001) and persist at 4-year institutions (Somers et al., 2004). They are the capacities for understanding both the college admission and financial aid processes. This may be because Mariama, Abdi, and Steven express a desire to continue their education at a four-year institution but have not yet begun the process of getting into such institutions. Additionally, none of the

students would use capacities related to college admission or financial aid when matriculating at the community college affiliated with the County program. Admission to the community college is granted to students who come up through County, and County pays for the students' coursework at the community college.[35]

There are similar parallels and distinctions between the *non*-first gens' conception of college readiness and the conception in the initial framework. That is because, Selma and Rubie, the two non-first gens, name exactly the same noncongnitive, college knowledge-related, and academic behaviors and attitudes that Mariama, Abdi, and Steven raise when discussing what capacities are important to their college readiness. Thus, the capacities that Selma and Rubie discuss parallel the ones that appear on the framework's original list, again with the exception of those related to accessing college.

How the First Gens' Conception of College Readiness Goes Beyond the Framework

Assertion #2. *Mariama, Abdi, and Steven mention four capacities that do not appear in the initial framework.*

Though the first gens' list of college ready capacities is mostly similar to the original one in the framework, they name additional capacities that they think are important to college readiness. For at least four skills listed in the initial framework (noted here in italics), the first gens name not just one but two of their behaviors or attitudes (noted here in quotes) that can fit that skill. For these students, *help seeking* includes "self-advocacy" and "building social capital," *goal setting and focus* includes "setting goals" and "following through," *time management* includes "managing their time" and "attending," and *acclimatizing to postsecondary culture* includes "appreciating personal identity" and "being part of a learning culture."

Assertion #3. *Mariama's, Abdi's, and Steven's stories contain examples of what their capacities (i.e., behaviors and attitudes) can look like because they identify the strategies that they say are important to putting each into practice.*

The first gens' narratives illustrate clearly visible and easily understood actions that they associate with each of the capacities on the list. Those specifics are the same types of knowledge

[35] Of the five study participants, only Selma (a non-first gen) was actively pursuing or had pursued admission to a four-year college by the time of the interviews. She does discuss actions like writing college essays or advocating with university admissions personnel as part of her narrative, but she mentions these strategies more in conjunction with capacities like writing well or self-advocating. Hence in my analysis, I associate those strategies with these two latter capacities instead of with the category of college knowledge related to accessing college.

often found in Karp's work (Karp, 2007; Karp & Bork, 2014; Karp & Hughes, 2008a). That is, the participants offer rich, detailed descriptions of what each behavior and attitude look like in practice, and they do so by identifying the constituent strategies that they put into practice (or encourage putting into practice). Through such descriptions, Mariama, Abdi, and Steven make each behavior and attitude tangible. For instance, it is clearer what practicing self-advocating looks like because they recall meeting regularly with advisors, teachers, and other school personnel, seeking those people out during office hours as well as before and after class, and communicating professionally and coming prepared when one does reach out.

Selma and Rubie, the two non-first gens, give similar descriptions of the capacities on the first gens' list; and they thereby reinforce the first gens' examples that depict what those capacities can look like in practice. It is evident that the first gens' and non-first gens' descriptions are similar because both subsets of students name comparable strategies for nearly all of the behaviors and attitudes that they list. To be more specific, of the strategies that more than one student talks about, *nine out of ten* of those strategies are ones that at least one first gen participant and at least one non-first gen participant agree are important to putting the associated behavior or attitude into practice.

In the rare instances when the first gen and non-first gen students discuss the same behavior or attitude but do not name the same supporting strategies, the first gen and non-first-gen students at least name strategies that compliment one another. For example, the two types of students talk about building social capital in slightly different but reinforcing ways. Selma (a non-first gen) advocates getting to know her teachers and letting them get to know her. Mariama and Steven (first gens) then offer conducive strategies for accomplishing Selma's tasks, including asking teachers how they are doing and being friendly.

The one major difference between the reports of first gen students and other students is with respect to building self-reliance. Selma (a non-first gen) offers all of the strategies that comprise the earlier definition of that behavior, which succinctly include seeking out challenges, learning from successes, and persevering. Mariama and Abdi share Selma's desire to *be* self-reliant, but they offer no ways of *building* that self-reliance as Selma does. This may because, as I will discuss in Chapter 6, the first gens in the study are part of families that necessitate self-reliance but that provide little guidance on how to be so.

Assertion #4. In addition to discussing capacities that do not appear in the initial framework and providing rich descriptions of most of the capacities on the list, *Mariama, Abdi, and Steven share anecdotes that establish that many of their capacities help them to be successful in college, thereby strengthening the argument that those capacities are forms of readiness for attending community colleges*.

When discussing all but two of their noncognitive behaviors (i.e., building social capital and building self-reliance) and all of their academic behaviors, the first gens' stories demonstrate that those capacities contribute to them being college ready, at least during their enrollment at the community college. Specifically, they associate these capacities with helping them to earn good grades, complete courses, persist in the program, attain degrees, or academically or socially integrate at the community college.

To an extent, the first gens report getting the same benefits from their capacities that researchers studying community colleges identify. For example, Abdi indicates that knowing core content benefits his college grades, and the initial framework indicates that a comparable skill—having content knowledge—similarly can improve students' GPAs (Mokher et al., 2018). But, many of the connections between the first gens' capacities and college success that they talk about do not appear in the initial framework. For instance, they indicate that they academically and socially integrate into the community college, and they say that four capacities benefit such integration: time management, attendance, asking peers for help, and critical thinking. None of the research cited in the initial framework identifies particular college ready behaviors that can foster academic or social integration.

Mariama, Abdi, and Steven do not link five of the capacities that they discuss to helping them succeed at the community college. However, Selma (a non-first gen) does make such links for four of those five behaviors, thereby supplementing what I learn from the first gens. In particular, Selma provides examples in which her capacities set her up to make the transition to a four-year university or college. She claims that her capacities to write well and build social capital facilitate her admission to an institution of higher education, and she perceives that her strategies for navigating college systems and appreciating personal identity make her more successful at academically and socially integrating into a postsecondary environment. Selma's recollections contrast with the first gens' stories. Mariama, Abdi, and Steven aspire to a bachelor's degree, like other first gens generally do (O'Shea, 2016; Tate et al., 2015). But,

Mariama, Abdi, and Steven do not explain which of their capacities may enable them to move onto a four-institution. This is perhaps unsurprising given research that find that first gens are prone to struggle with mobilizing the skills needed to access college (Harrell & Forney, 2003; McCarron & Inkelas, 2006).

Unanswered Questions

The first gens' list of college ready capacities differs in some ways from the one in the initial framework; and as just discussed, those differences add new information to the prior understanding of what college readiness can look like. But, those differences also raise a lingering question: What about the first gens' experiences *cause* their conceptions of college readiness to differ from the one in the initial framework?

For instance, we have not yet heard why the first gens (or the other two students) do not mention two capacities that scholars associate with college knowledge. We also have no explanation why the students discuss four capacities that scholars do not. And, we do not yet know why the informants speak at far greater length about noncognitive practices (on average for nearly 80 percent of the interview time during which college ready capacities are discussed) than they do about either academic or college knowledge-related capacities (both respectively for only about 10 percent of the interviews on average) (see Tables 4.1 and 4.2).

These questions remain because the findings in this chapter represent only a portion of the first gens' overarching narratives. While it is now clearer which *capacities* constitute college readiness for them, what the first gens reveal in this chapter does not address how *context* and *community* help them to learn their college ready behaviors and strategies. Thus, the next two chapters respectively concern how the County program and the students' communities influence their development of college readiness.

Chapter 5 - Context

Introduction

In the preceding chapter, I use the students' testimonies to generate and flesh out a list of capacities that they say are important to college readiness, which is useful for comparing to the initial framework's conception of what college readiness can look like in practice. In order to determine what might teach the students the importance of those capacities, I turn my attention to how County affects the students in the study because, according to the framework, an educational context can influence its students' postsecondary experiences and outcomes.

In this chapter, I specifically examine what impact County has on the students' college ready behaviors, attitudes, and strategies. I guide this inquiry using the study's second research question:

> What elements of the program design in this study do participant students indicate affect their development of their practices?

To summarize what I find, the students do indicate that County influences their development of college ready capacities, and they specifically say that the following elements of the program are influential: direct instruction, assessment and intervention, rigor, relevance, dual enrollment, the joint secondary-postsecondary partnership, and relationships at County. The students indicate that these elements affect the following capacities: self-advocacy, building social capital, goal setting and follow-through, building self-reliance, time management, attending, organizing / preparing, navigating college systems, appreciating personal identity, being part of a learning culture, critical thinking, knowing core content. While the first gen and non-first gen students in the study all credit the aforementioned design elements with developing these college ready capacities, the first gens state that there are also circumstances in which those same parts of the County program are not beneficial to developing college readiness.

In this chapter, I address these findings in two ways. First, I convey what Mariama, Abdi, and Steven (the first gens) report are the ways that the County context affects their development of their college ready capacities, and I note how that compares to and differs from what Selma and Rubie (the non-first gens) say. Second, I then compare and contrast the first

gens' perspectives on County's impact against the initial framework's conception of how context influences college readiness.

Participating Students' Conception of How the County Context Affects their Development of College Readiness

All five participants perceive that their experiences at County have a profound influence on the development of their college ready practices. Of the portions of the interviews spent discussing the causes of college readiness, the majority of informants' interview time (Table 5.1) and coded utterances (Table 5.2) are dedicated to discussing the influences of County's program.[36]

Table 5.1

Proportions of Interview Time Dedicated to Each Type of Developmental Influence

	First Gen Participants			Non-First Gens		
CATEGORY OF PRACTICE	Mariama	Abdi	Steven	Selma	Rubie	**OVERALL**
Program Design Elements	50%	61%	65%	84%	84%	**70%**
Community Culture	50%	39%	35%	16%	16%	**30%**

NOTE: Columns may not add to 100% due to rounding.

Table 5.2

Proportions of Coded Utterances Dedicated to Each Type of Developmental Influence

	First Gen Participants			Non-First Gens		
CATEGORY OF PRACTICE	Mariama	Abdi	Steven	Selma	Rubie	**OVERALL**
Program Design Elements	65%	67%	63%	86%	85%	**73%**
Community Culture	35%	33%	38%	14%	15%	**27%**

NOTE: Columns may not add to 100% due to rounding.

When discussing how the County program influences the development of their college readiness, the students talk about a number of program design elements. Again, they say that the County program offers direct instruction and formative assessment, is rigorous and relevant,

[36] Based on these metrics, most of them see their communities as relevant to their development as well (which I will discuss in the next chapter), but they universally imply that momentum points as I defined earlier are less consequential (a point I will revisit in my final chapter).

provides dual enrolment through a joint secondary-postsecondary partnership, and builds relationships. In this chapter, I discuss in turn the students' descriptions of each of these elements.

I summarize these findings in Table 5.3. The first column names the elements of County's program design that the students mention. For each element, the table lists the capacities that the students say that a given element affects. The table indicates what effect(s) each program element has on the associated capacities. That is, based on what the students say, the elements can:

- Promote a student's development of a capacity (✔);
- Inhibit a student's development of a capacity (✖);
- Help a student to evolve (i.e., add strategies to or revise) her use of a capacity over time (🡅); and/or
- Cause a student's use of a capacity to devolve (i.e., have fewer strategies or happen less often) over time (🡇).

Finally, the table relates quotes that represent *how* the students think that an element affects their development of the associated capacities.[37]

Table 5.3

Students' Conception of the Elements of the County Context that Affect College Readiness

Design Element	**Behaviors & Attitudes**	**Promoted (✔) or Inhibited (✖)**	**Evolved (🡅) or Devolved (🡇)**
Direct Instruction	Manage your time	✔ "In 9th grade they like really emphasized that like we have to use our planners to keep ourselves organized." (Rubie, Abdi)	
	Attend	✖ "I give no credit to County for getting me to come to my classes more often, and I think that that's something that they need to work on." (Steven)	

[37] Throughout the chapter, I primarily discuss County's program design elements that multiple participants say influence their development of college ready capacities, while occasionally sharing notable exceptions.

Design Element	Behaviors & Attitudes	Promoted (✔) or Inhibited (✖)	Evolved (↑) or Devolved (↓)
Direct Instruction (*cont.*)	Organize & prepare	✔ "Basically you know, [the County teachers] always told you… have your notebook [and] …your books out on time…. So I got used to that." (Abdi) ✖ "It's definitely not conveyed enough to the students that organization is important. I think the school kind of treats it as one of those things that you should already know." (Steven)	
	Think critically	✔ "We have a very, very well developed critical thinking class and it is taught by teachers who are trying to get you to understand the importance of an open mind." (Steven)	
Assessment & Intervention	Know core content	✔ "So that's why most of the students who make it to the college like they don't have a hard time in class because they already have the skills. [County] does not let you go unless you have the skill" (Abdi, Selma)	
	Self-advocate	✔ "You have to have a meeting every two weeks with your teachers… and if you don't, they put comment in your, I think it's called PowerSchool." (Abdi)	
	Attend	✔ "If you don't raise your hand and if you don't talk a lot, they put a comment [in PowerSchool] if you don't participate" (Abdi) ✖ "Because you were put back in the high school… you could have the choice to shut down and not listen to this; not be a part of the class." (Steven)	
Rigor	Know core content	✔ "I definitely felt like the material… was useful information; it wasn't kind of like pointless you know. And it prepared for the college classes that I was going to be in." (Selma, Rubie, Abdi)	
	Build self-reliance	✔ Students were able to be "successful at something they thought they couldn't be successful at, and then [know how to] apply those skills to the next situation." (Selma)	

Design Element	Behaviors & Attitudes	Promoted (✔) or Inhibited (✖)	Evolved (↑) or Devolved (↓)
Rigor (*cont.*)	Manage your time	✔ The project "took us the entire semester. And like on top of the [regular course] workload that we had, we also had to work on that [project]. So that was, that's what I mean by rigorous." (Selma)	↑ "I mean when you're in [County] you can procrastinate I think…. But I think with a college… you're less likely to get an extension" (Rubie) ↑ If I have an "essay due tomorrow, it's really nothing to me. For a while before, I would think like: 'I don't have enough time.' But now I just think [the college course] kind of trained me." (Abdi)
Relevance	Set goals	✔ The program "help[ed] you to determine what you're going to do" for a career. (Selma, Rubie, Steven) ✖ "This program in particular… makes you feel like you need to be rushed because you feel like you need to decide what you want to do for a career so that you're benefiting most from the degree that you're getting" (Steven)	
Dual enrollment & Joint secondary / postsecondary partnership	Navigate college systems	✔ "I mean that's really helped me with like getting the feel of what college classes are like." (Selma, Steven) ✔ "Just having the ability to choose what, like, what classes I want to take and when I want to take them was very beneficial to me." (Selma)	
	Attend	✔ "I learned that a lot especially in college classes… How are you going to succeed in that class if you're never there?" (Selma) ✖ When County teachers "stay on you to help you do good in school and stay in classes, maybe they set students up for an unrealistic schooling experience… [because] it's not like that in college classes." (Steven)	↑ "I'm loving the [college] environment that I'm in. So I want to be here now; want to be successful; and I want to push myself to… follow that daily routine of going to class." (Steven) ↑ By participating in college classes you're "just going to build it; it's not an easy process. But I get in there and I'm shooting my hand up you know." (Mariama) ↓ "Honestly in lecture classes, when there's 200 something in our class, I never raise my hand." (Abdi)

Design Element	Behaviors & Attitudes	Promoted (✔) or Inhibited (✖)	Evolved (↑) or Devolved (↓)
Dual enrollment (*cont.*)	Appreciate personal identity		↑ "Because we're on the college campus, …you're around so many different people: some of whom don't look like you, some of whom don't think like you, [and as a result] you're just learning so many things." (Mariama)
	Know core content		↑ I "strengthened that area of my brain that I haven't really been working before I took this [college] class." (Selma)
	Manage your time		↑ "There's some teachers also in the college, they're not like going to remind you there's a test coming up. They get it from the syllabus" (Adbi, Rubie)
	Self-advocate		↓ "And the one thing that I avoided was talking to the [professor]. Because I think it's showing that you're criticizing the person.… And I encountered that the professor, she didn't like anyone criticizing her." (Abdi)
Relationships	Build social capital	✔ County personnel were approachable because they "cared so much about the students" and the Dean was "the coolest guy." (Steven, Mariama, Selma)	↑ "I had her another semester… [and] she still taught the same way, the tests were still the same way, she was still the same person. But I had to learn to adjust." (Mariama)
	Self-advocate	✔ When I was "struggling," my BASE advisor "was telling me to go talk to the teacher and try to meet with them there in their office hours." (Abdi, Selma, Rubie)	
	Set goals & Follow Through	✔ My BASE advisor counseled me to explore career options through my college courses and helped me shape my EDP to "take control of what I need[ed] to do" to earn my degree. (Selma, Mariama)	↑ "Realizing that the instructors at the school actually love me, actually care about me, is one of the bigger things and motivational factors that made me decide that I need to push myself." (Steven)
	Attend	✔ "When you like a teacher, you're attentive in that class… [and] you're going to look forward to going to that class." (Steven)	

Design Element	Behaviors & Attitudes	Promoted (✔) or Inhibited (✖)	Evolved (🡅) or Devolved (🡇)
Relationships (*cont.*)	Be part of a learning culture	✔ "Everybody is there to learn, and that's because we're surrounded by like a whole bunch of adults" (Selma)	

KEY: The reported effects include times when the program (a) promotes (✔) or inhibits (✖) the students' development of the named practice as well as (b) contributes to the named practice evolving (🡅) or devolving (🡇).
NOTE: The non-first gens' names (and any data attributable *only* to non-first gens) appear in gray text.

Direct Instruction

The students indicate that direct instruction both promotes and inhibits the development of their capacities. Starting with the former, the students note that County faculty deliver lessons or direct reminders that promote the development of behaviors like time management, organizing and preparing, and critical thinking.

Steven (a first gen) repeatedly praises County's critical thinking course: a social science-based class aimed at developing critical thinking strategies.[38] He emphatically summarizes his thoughts on this class by stating:

> But I can tell you critical thinking is the most beneficial, most important class that you could ever take, the most important subject. If everyone in the world took a critical thinking class, the world would be a better place. It teaches you… this is the reason why the students who come to our school are going to be ones that change nations. Because we have a very, very well developed critical thinking class and it is taught by teachers who are trying to get you to understand the importance of an open mind.

Specifically, Steven notes that the class provides actionable strategies, like having a "world view" and "getting outside your comfort zone," that "work[] in all the important [steps] for building relationships with people out of your community." He also lauds how the course allows students to bring perspectives from their own lives into discussions of social issues. Selma (a non-first gen) says that the class similarly promotes the development of her critical thinking as well in that it "definitely taught me to not just look at a situation so one sidedly and kind of see what others have to say."

Rubie (a non-first gen) recalls that her County teachers promote her development of time management by regularly checking that she is using a planner and course syllabi. She says:

> I remember [it was in] my math [and] English [classes]. I think there would be a planner check, when I was in 9th grade. Because in 9th grade they like really emphasized that like

[38] Barnett, Bucceri, et al. (2013) found that it was common for ECDs, mostly via their English curricula, to comparably work with students on intellectual openness, inquisitiveness, analysis, as well as reasoning, argumentation, and the use of proof.

> we have to use our planners to keep ourselves organized because you need to like remember dates and like when your homework is due. That's like the best way to do it.

Abdi (a first gen) remembers these same prompts and that at first he did not respond to those prompts by writing dates in his planner. After failing a few planner checks though, he says that he got "used to" utilizing his planner "like a lifestyle": "No one tells me [to do] that now. It's just something that I learned from them. I used to think it was useless, but now I see… that it is actually important to me now."

Abdi similarly remembers that direct reminders from County faculty promote the development of his organization and preparation behavior:

> Basically you know, [the County teachers] always told you, they were always like, "have your notebook." Little things: like I remember that if you don't have your books out on time you get a tardy…. So I got used to that—like I've been doing that for like months. So I take it out and have it ready on my desk.

Steven also offers a way in which the program benefits his organization and preparation behavior. He credits County faculty with using class time to review study techniques like flash cards that he finds useful when preparing for exams.

However, when recalling how they experience direct instruction, the first gens allude that this County program design element can also inhibit their development. As is common with the ECD model (Rosenbaum & Becker, 2011), County provides direct instruction in soft skills (i.e., noncognitive practices); but Mariama and Steven do not find that instruction to be effective for them. Mariama stated bluntly: "Every kid hates soft skills." Mariama refers here to the soft skills lessons that County personnel directly teach during BASE advisory sessions and within the first fifteen minutes of content classes over the first five weeks of the fall semester.[39] Mariama offers reasons why that instruction does not "click for her," claiming that it seems repetitious, "dragged out," and "exaggerated." Moreover, Steven believes that there is limited effectiveness to the program's student soft skills manual: a collection of text and exercises used as reading material and class activities to teach soft skills. He comments specifically that those materials come across "a little too childish in a way," by which he meant that the material is not challenging and seems unimportant and "stupid."

[39] At County, BASE advisors met every Friday in a classroom setting with all of their advisees who were in the program's 9th-grade academy or the First Year of the Middle College portion of the program. Barnett, Bucceri, et al. (2013) noted that such "house advisory" elements could be a part of a common ECD model. To the extent that this element mirrored student success courses, Karp et al. (2012) found that it may teach learning techniques, self-awareness, and self-advocacy (i.e., noncognitive skills) as well as knowledge about how to navigate college systems (i.e., college knowledge).

Steven gives more specific reasons why he thinks that the County program's direct soft skills instruction inhibits his noncognitive behaviors. He critiques the program's attention to teaching organization and preparation:

> And so my organization skills really do suck, and that's not something, even though [the County faculty] says that it's important, it's not something that they stick onto. …It's definitely not conveyed enough to the students that organization is important. I think it's, I think the school kind of treats it as one of those things that you should already know.

He also finds County to be ineffective at prompting him to attend class:

> I give no credit to County for getting me to come to my classes more often, and I think that that's something that they need to work on. …You get a caught up in that freedom once they've lifted that pressure on you.

He contends that County personnel and their policies do not prompt him with timely repercussions when he fails to attend his college classes.[40]

Assessment and Intervention

As seen at other ECDs (Barnett et al., 2015), the students cite a number of ways in which County integrates systems for assessing their progress and intervening to improve their behaviors when necessary. From how the students say that they experience these assessments and interventions, I note that they credit all but one of such systems with promoting their development.

Three of the students talk about the various content-related assessments that County employs as benchmarks for advancing in the program. Selma (a non-first gen) recalls that County math instructors weave into her course assessments problem sets representative of math technical skills that she has to master. Selma alludes that having to get those problem sets correct confirms to her that her math skills are sufficient for college. Like the benchmarks woven into the math exams, Abdi (a first gen) adds that County also uses standardized placement exams to assess his progress:

> You have to have the same level of skill as another college student to be in college. So that's why most of the students who make it to the college like they don't have a hard time in class because they already have the skills. [County] does not let you go unless you have the skill.

[40] On its website, County reports that: "Attendance in college courses is reported by the student, not by the teacher, twice each year. Because each [County] student taking college courses has an individually tailored schedule, each student must request the signature of his or her college instructor to document attendance. This is a serious responsibility for all [County] students, because this documentation -- called 'red cards' -- provides our funding for books, materials, and college tuition."

Here Abdi notes that County uses testing as gateways for ensuring he is ready to matriculate in college courses.

Rubie (a non-first gen) explains that, beyond simply measuring her content-related behaviors, gearing up to perform on the assessments also helps her to develop those behaviors. She recalls:

> Yeah actually with the [standardized exam] you have to do five hours of practice online, on the website before you can get approved to take it again. So the practice is personalized based on what you got wrong on that [exam] or on what you were struggling on and what they saw that you've been really good on. They give you practice based on that.

Here, Rubie explains that her repeated attempts to earn the minimum score develops her math skills in ways targeted to her needs. Rubie's experience with this County assessment and intervention system mirrors the improvement in math skills that scholars see with other standardized testing and individualized learning plan systems (Grady, 2016).

The students mention how having to meet other County milestones, namely the soft skill credential, promotes the development of their noncognitive behaviors. County mandates that the students be soft skill credentialed by all of their County content teachers before being able to matriculate in college courses. Steven has a positive opinion of the way in which the County faculty decide to issue students their soft skills credentials. Namely, across two days in the fall semester, the County faculty sit together as a group and review every eligible student one by one based upon teacher comments and the soft skill grades each student achieves in all of his courses. Steven commends this process for how invested the teachers are in helping students know "what we could do to be better in school." Because the first of these two credentialing days happens mid-term, Steven agrees that it is a positive that teachers and students have time to develop the students' satisfactory levels of soft skills before term end.

To be more specific, Rubie concludes that the need to reach the soft skill credential specifically develops her self-advocacy:

> [The County teachers] basically let you know when you're college ready with the soft skill credential. I think I knew when I was ready when I talked to my teacher and they said I was, you know, doing good in their class (i.e., in terms of the content grade) and they said I had good soft skills. [And this came from] advocating and making sure you fix whatever they tell you to fix when you advocate for yourself.

By seeking out feedback from her teachers, Rubie is able to engage her self-advocacy behaviors and learn what other behaviors she could improve.

Mariama believes that the need to be credentialed develops her attendance behavior. She says that, early in the program, she gave little energy to one attendance-related strategy: participating in class. However:

> But it hit me, when the teacher was like: "I'm not letting you go on to college classes." It, like, broke my heart because I was so upset; I am such a good student. It's just that I don't like to talk. And I was ready for college classes, so that frustrated me. So I turned that frustration into something good. I started talking, even if I didn't want to talk or I really didn't know what I was saying. And so I raised my hand and I got to a point where it became normal that I'm always willing to talk.

Here, Mariama receives formative feedback about her noncognitive attendance practice that prompts her to develop new strategies around participating in class. Edmunds (2010) finds that students at ECDs generally learn early in such programs to contribute to class.

Abdi reports a similar experience in which County's formative feedback and grading system prompts him to self advocate:

> You have to have a meeting every two weeks with your teachers and talk to them. They're not going to tell you: "hey, make a meeting with me." It's your own choice; and if you don't, they put comment in your, I think it's called PowerSchool. They'll say: "hey, [Abdi] is not communicating with me right now." They're going to tell you come visit them, so it's your responsibility to go to meet with the teacher.

Abdi also claims that the PowerSchool system has influence over his strategy of participating in class:

> Participating and raising your hand. Yeah, if you are not part of the discussion, you lose points. If you don't raise your hand and if you don't talk a lot, they put a comment [in PowerSchool] if you don't participate.

Abdi's BASE advisor confirms that PowerSchool may catalyze Abdi's development of his practice: "PowerSchool is definitely a tool for students to use so they can track their own progress and improve where needed."

One other assessment and intervention system at County is that students need to pass their college courses in order to keep taking those courses and maintain their soft skill credential. Rubie (a non-first gen) and Steven (a first gen) disagree over the effect of this system on their respective development. Rubie's poor performance during one semester almost led to her being de-credentialed, but she was able to stay in college classes because she self-advocated with County' Dean, explained the personal circumstances underlying her performance, and got permission to continue in her college courses.

In contrast, Steven feels being de-credentialed inhibits development rather than promotes it. After failing some of his college course, County "pulled back" Steven from college courses and into the classes taught by County faculty. Steven alludes that this process inhibits his attendance behavior:

> But because you were put back in the high school, like arises a bunch of other issues: a bunch of pressures and insecurities because you're back in these classes; going back to how the teachers treat you when you're put in a class like that and you're getting treated like a child, it messes with your brain. And you could have the choice to shut down and not listen to this; not be a part of the class.

He goes on to say that, by being in classes with much younger students, he feels both deflated and as if the instruction does not incorporate the experience that one accumulates from having already taken college-level classes.

Rigor

Of the ways in which ECDs integrate rigor into their programs (Barnett, Bucceri, et al., 2013), the students talk about the rigor of County's program in terms of how academically challenging its courses are.[41] They say that rigor of this sort promotes the development and evolution of their practices.

Selma (a non-first gen) sums up the sentiment of multiple students that the County teachers "made their courses harder than the college courses." She finds that her "harder" County courses prepare her with the content knowledge she needs in her college classes:

> I definitely felt like the material wasn't just material that like, like it was useful information; it wasn't kind of like pointless you know. And it prepared for the college classes that I was going to be in. And actually when I got into the college classes, I realized that they were easier than [County] classes, which is why I'm kind of grateful for the fact that they made it seem like it was harder than it was going to be because once I did transition, it wasn't as bad as I thought it would be.

Selma's experience with County's rigor can reflect how students at ECDs generally feel prepared and capable of doing well in their college courses (Cerrone et al., 2013).

Selma adds that the workload of her County courses also prepares her to manage her time. For example, she talks about her County English teacher assigning an independent study project. She recalls:

[41] Another way in which the literature discusses rigor was in terms of being required to fulfill certain numbers and levels of courses across core subject areas (Jennings et al., 2007; Rosenbaum & Becker, 2011). That form of rigor also was a part of County's program, as was common within the ECD model (Berger, 2007).

> So we had to go on kind of like research our own topic, and like it took us the entire semester. And like on top of the [regular course] workload that we had, we also had to work on that [project]. So that was, that's what I mean by rigorous.

Selma notes that this project demands that she balance her time within the course itself while also requiring she mobilize a number of other college ready practices: write well, pick her own topic (i.e., set a goal), complete interim steps (i.e., follow through), meet with the teacher regularly (i.e., self advocate), and use "a different way to do research" to think about the topic (i.e., critically think). Of these capacities that Selma mentions, Ramsey-White (2012) finds evidence that links ECDs to the development of time management.

Thus far I present the students perspectives on the rigor of the courses at the secondary level of County's program: that is, those courses taught by County faculty. The students also comment on the rigor they experience in the postsecondary level of the program: that is, in their community college courses.

It is, in part, interesting to hear about rigor at both levels of the program because the students reveal that rigor *initially* develops their capacities when they are at the secondary level, as I discuss just above, and at the postsecondary level. As an example of the latter, Selma says that she learns to build self-reliance as a consequence of having been challenged by her college academics. She recalls two incidents in which she was "going to fail" her college-level chemistry and calculus courses, leaving her feeling "hopeless," that she "could not do this class," and as if it was "going to ruin her life." However, after self-advocating with and getting help from her BASE advisor, the professors, and tutors, Selma is able to be "successful at something [she] thought [she] couldn't be successful at, and then [know how to] apply those skills to the next situation." Selma is not alone in developing self-reliance, as students at other ECDs report developing that behavior (M. M. Williams, 2014).

It is perhaps even more interesting to hear about rigor at both levels of the program because the students reveal how rigor contributes to their capacities *evolving*. Specifically, a few students explain ways in which rigor helps their time management to evolve, either by adding strategies to their mobilization of that behavior or by revising their existing strategies. As an example of the former, Rubie (a non-first gen) explains in the prior chapter that she learns early in the program to use her planner to break up tasks and accommodate for last-minute obstacles. She then credits the rigor of her college classes with prompting her to *add* the strategy of fulfilling tasks well before their deadlines:

> I mean when you're in [County] you can procrastinate I think. They're a little bit more flexible about that you could ask for like an extension. But I think with a college, because they are on like a set schedule, you're less likely to get an extension.

As an example of revising a behavior, Abdi (a first gen) in the prior chapter talks about learning early on in the program to designate a specific daily study time. He then recalls taking a college-level English course in a shortened spring semester, which demands a rigorous number of assigned essays due across a shorter period of time. He reports that that experience revises his time management behavior:

> Now it's like someone tells me: "hey, you have an essay due tomorrow", it's really nothing to me. For a while before, I would think like: "I don't have enough time." But now I just think [the college course] kind of trained me.

That is, Abdi's college English course revises how much study time he thinks he needs to designate in order to complete a writing assignment.

Relevance

Two of the students talk about being able at County to engage in courses, classwork, and other learning opportunities that (a) connect to their interests and goals and (b) involve real-world scenarios and applications. They say that these forms of relevance both promote and inhibit the development of students' practices.

Starting with promoting development, Steven's BASE advisor recalls that Steven (a first gen) most effectively sets and follows through on goals when he is able to take college coursework that is relevant to his career ambitions. Selma speaks at length about similar connections within the County program between relevance and her goal setting and follow-through behaviors. Selma (a non-first gen) states that she hones her professional interests by taking courses like chemistry and physics at the college. She says that it further "helps you to determine what you're going to do" by working with her BASE advisor to design her course of study, or educational development plan (EDP) as it is called in the County program. Additional program experiences that are relevant for Selma include job shadowing with an oncologist (which the program facilitates) and taking advantage of the County program's pathway panels. In this latter element, panels made up of older students (and faculty) who pursue various degrees of study at the community college share their experiences with younger students like Selma who are just deciding upon their degree ambitions. In these ways, Selma describes County program design elements (a) that promote relevant learning, (b) that are common to the ECD model

(Cunningham & Wagonlander, 2000; Jordan et al., 2006), and (c) that researchers have found to benefit students' career goal setting (Tate et al., 2015).

In an inverse way, Rubie's story reinforces the potential importance of relevant learning to her goal setting behavior. She explains:

> I ended up doing foundations of information systems [as my degree pathway]. But that is not the path I actually want to take when I go to a university. I actually want to be a lawyer, which is like totally different than from programming and things like that. But I realized that when I was in those [college programming] classes, I struggled a bit because it involves a lot of steps and if you make one mistake, the whole thing could mess up. So I realized like I'm not good with you know steps and things like that, so how can I make a career out of those things.

Thus, Rubie reveals that her college course experiences help her learn what career choice that she does *not* want.

Steven argues that, for him, the professionally relevant learning at County may inhibit the development of his goal setting behavior. Steven says, at times, he feels "rushed" by the County program to focus on a degree goal. That may be because, as his BASE advisor observes, Steven prefers to "bounce around a lot between" the "bigger picture, longer term" goals that "motivated" him rather than a specific career goal. As a result perhaps, he laments that:

> This program in particular… makes you feel like you need to be rushed because you feel like you need to decide what you want to do for a career so that you're benefiting most from the degree that you're getting. That's the problem, that's the biggest problem with the program. It doesn't, they don't teach their student enough that it's OK to take your time. They don't tell students enough.

Steven's opinion seems to contrast with Selma's, who says:

> [When] I transitioned [to college classes,] like a lot of my friends would still have like a whole [secondary-level] schedule, or like some of them would have had a full college schedule. Like it just depended on the student. And I thought that was like really great because like I mean there was no pressure. Like even if you did fall behind a little bit, like if you got into like your third year and you were still taking [County] classes, your teachers and your BASE advisor really work on moving you towards [taking college classes].

While Selma believes that there is "no pressure" on County students to find relevant degree pathways and careers, she does acknowledge that not "moving towards" taking college courses as of third year does imply that a County student has "fallen behind." Because Steven had been pulled back into County courses as late as his third year in the program, Selma's description could apply to him. Thus, Selma's defense of relevant learning at County indirectly supports Steven's perspective.

Dual Enrollment and a Joint Secondary-Postsecondary Partnership

As with the common ECD model (Edmunds, Unlu, et al., 2017; Wechsler, 2001; Wolk, 2005), the students talk about the opportunity at County for the students to take college courses and earn Associates degrees or certificates. They further describe how the County program also offers services through its partnership with the community college in which it is located. The students reveal that these two elements both promote and inhibit their development, and the students indicate that these same elements influenced the evolution and devolution of their capacities.

Promoted and Inhibited Development. Selma (a non-first gen) discusses how dual enrolling and being a part of the community college permits her to rehearse strategies that she uses to navigating college systems and the physical space of a college. About these elements, she says:

> I mean that's really helped me with like getting the feel of what college classes are like… [and] how to like sign up for classes and get your books and stuff… [I also] use maps, ask people where things are, I mean. It's better to be like safe than sorry, to know where you're going instead of being, you know, like: "oh, I'm too afraid to ask this person" or, you, know ask for help.

Similarly, designing and executing her EDP also allows her to "practice" navigating college systems. As she puts it: "Just having the ability to choose what, like, what classes I want to take and when I want to take them was very beneficial to me." To Selma's description, Steven (a first gen) adds that the program's joint partnership develops his ability to take advantage of the community college's academic supports. He recalls that his County teachers make it part of class assignments to access the "library" as well as "writing centers, and math tutoring centers, and things like that."

Selma then goes on to indicate that dual enrolling reinforces the importance of attending class:

> I learned that a lot especially in college classes because they really do cover a lot of important material. So if you show up late and you miss like half the material it's like that could be on the test and you don't know that. How are you going to succeed in that class if you're never there?

For her, it is the amount of course content covered during college class session that make her attendance so important.

In contrast, Steven indicates that dual enrollment *in*directly inhibits his noncognitive practices like attendance. To elaborate, he believes that there is "pressure" within the County program to "rush" forward toward dual enrolling. That is, he perceives that it is the norm for students to be in college courses by the winter semester of what in a traditional high school would be 10th grade. Because he at times feels "desperate" to earn the credential that would permit him to dual enroll by that time, Steven says that: "I faked my soft skills." For example, Steven admits that, as a "charismatic person," he misuses his body language (e.g., smiling, nodding) during class to give the appearance of active listening without actually using those practices to learn:

> So I had one instructor say to me: "At the beginning of the semester, I felt like you were going to ace this class. You looked like you knew everything that was going on." When in reality, I didn't, I didn't. I was, I was, I was just going along with what [the] soft skills [curriculum] taught me, and it was to be attentive in class, or at least look attentive.

He also notes that he relies on his County teachers to keep day-to-day track of his absences and tardiness. As he puts it: "my biggest problem was… being able to discipline myself to follow that daily routine of going to class, …stay in class, not leave, and things like that."[42]

While Steven does acknowledge in these quotes his role in the story, he still maintains that the perceived "pressure" or "rush" in the County program to dual enroll is to blame for inhibiting, or underpreparing, his development of attendance and other noncognitive behaviors. For instance, he states that the way that County teachers "stay on you to help you do good in school and stay in classes, maybe they set students up for an unrealistic schooling experience, you know. And in high school, that might be what it's like but it's not like that in college classes." Specifically, he concludes that the "one-on-one care" given by County teachers contrasts too starkly with the more aloof, hands-off approach Steven attributes to college professors. As a result, he says that: "I got through when I wasn't ready to take college classes: very, very big mistake." The "mistake" for Steven is that, after dual enrolling: "I became a really, uh, C/D student for a very, very long time. And a big reason for that was because I faked my soft skills and I got into college classes when I wasn't ready."

I choose to convey this part of Steven's narrative in association with dual enrollment because it is that element of the County program, and the norms Steven perceives around it, that

[42] While not in reference to Steven, I found it interesting that Mariama independently stated that, in her observation, classmates who "faked" their soft skills seemed not to succeed later in their college classes.

he in part blames for inhibiting his development and hurting his subsequent postsecondary performance. This critique parallels ones that Steven reports earlier in this manuscript. Namely, he maintains that relevant learning at County contributes to him feeling similar pressure to pick a career and degree program, and he criticizes having been pulled back from college classes into County courses. Collectively, in his opinion, these elements inhibit his goal setting and attendance behaviors. As a result, Steven says that at one point he considered giving up on his goals and not attending school by dropping out of the County program.

Evolving and Devolving Practices. Because Steven and the other students describe their development of practice across the levels of the program, I am able to note how dual enrollment contributes to the evolution and devolution of their practices. Among County's program design elements, the students recall a number of instances of evolution (and the only case of devolution) when they discuss dual enrolling and being in the community college environment.

To return to Steven's story, he says that dual enrolling not only exposes the weaknesses in his attendance behavior but also challenges it to evolve. When we spoke, he had returned to college classes and says that he added regular physical attendance into his strategies:

> I just recently I have begun come to love school, and I've came to the point in my life where, like, I'm loving the environment that I'm in. So I want to be here now; want to be successful; and I want to push myself to… follow that daily routine of going to class.

He also says that, with his professors, he revises his attendance behavior to be more "genuinely" attentive in class:

> By you nodding your head at what you get and then showing facial expressions when you don't understand something, it helps the teachers know what they need to focus more on and help yourself categorize what you know, what you don't know, what you need to spend more and more time learning from, what you don't need a lot of time learning.

These evolutions in his attendance behavior help Steven avoid dropping out of the program, as do the relationships the County program offer him (which I discuss in the next section).

Mariama, another first gen, undergoes an evolution of her own attendance behavior once she dual enrolls. She says that when she entered college classes, she "kind of struggled a bit because" she had "anxiety" that what other students contributed to class discussions was "smarter," resulting in her telling herself that "whatever I'm saying is not important" and that "don't raise your hand and embarrass yourself." She says that the next two college semesters "weren't good" and included an incident in which she "cried in the middle of a speech in COM

(communication) class because I was worried I was going to sound stupid." As a dual enrolled student though, she recalls having positive experiences with encouraging and supportive professors, which contribute to her regularly participating as an attendance strategy: "it's like something you're just going to build it; it's not an easy process. But I get in there and I'm shooting my hand up you know."

Mariama also revises her strategies for appreciating personal identity. She admits that she considered herself and her fellow County students to be more "mature" and "skilled" than the community college students who are in her classes but who are not County students. She adjusts her perspective after further dual enrollment in classes like her political science and African American literature classes. She reconsiders that: "Because we're on the college campus, …you're around so many different people: some of whom don't look like you, some of whom don't think like you, [and as a result] you're just learning so many things. Like you can sit down with someone for like ten, fifteen minutes, you just learn so much, you know."

Selma (a non-first gen) exemplifies how dual enrollment adds to her academic behaviors. Reflecting on both her County and her college physics courses, she says that she came away from the first with content knowledge but did not learn content-related technical skills until the college experience. In her words: "I wasn't really taught the thinking process there [in the County physics class] as much as like just learning the material because it was this… I feel like this [college] class was really beneficial to me" and "strengthened that area of my brain that I haven't really been working before I took this class." Research finds that students at ECDs generally shared Selma's experience of coming away with stronger academic behaviors (Jennings et al., 2007; Woodcock & Beal, 2013).

Abdi (a first gen) and Rubie (a non-first gen) provide examples of how dual enrolling help their time management behaviors to evolve. Abdi had learned early at County to use a planner, but dual enrollment adds the strategy of also using his course syllabi: "There's some teachers also in the college, they're not like going to remind you there's a test coming up. They get it from the syllabus." Like Abdi, Rubie mentions using her planner to track her time in relation to her classes, but she says that "the opportunity to get your associates degree or a technical certificate" teaches her that tracking her progress toward her degree is an added time management strategy.

In the above ways, the students report the reasons why their experiences with dual enrollment and a college environment may contribute to the evolution of some of their practices. However, Abdi also notes an instance in which these same elements may contribute to the devolution of his attendance and self-advocacy behaviors.

Abdi's BASE advisor recalls that, while he was in his County classes, Abdi had effective attendance strategies that enabled him to get soft skill credentialed. For example, she notes his County teachers made "positive comments about his participation." As a college student however, Abdi reveals that he puts that strategy into practice less often because of circumstances he encounters once he dual enrolls. He said that one reason why he participates less as a college student is because "honestly in lecture classes, when there's 200 something in our BIO class, I never raise my hand." He also saay that he often does not ask questions in class because "everyone is going to look at you and I don't want to sound like dumb or anything, you know." In particular, he alludes that professors who "put you on the spot" and ask "why don't you understand" may make him less willing to participate. Lastly, Abdi's BASE advisor reveals that, despite him having regularly physically attended class when he first dual enrolled at County, Abdi's attendance in college classes is an "issue." While I did not press the advisor for the cause of this issue, this is another way in which Abdi's attendance behavior devolves later in the program.

Abdi also self-advocates less after he dual enrolls. He talks about two negative interactions with college professors that seem to contribute to his self-advocacy devolution. In the first instance, he avoids asking a professor to illustrate course concepts using examples, which he says normally benefit his learning. Using the word "teacher" to refer to the professor, he recalls:

> And the one thing that I avoided was talking to the teacher. Because I think it's showing that you're criticizing the person.… And I encountered that the teacher, she didn't like anyone criticizing her. She wanted to be perfect. So some of the students went to her, and it actually made it worse for them. She actually would grade their stuff harder. So I did not talk to her.

Abdi has a more direct negative interaction with a psychology professor who he seeks out for help understanding the material:

> I remember I scheduled a meeting with her once, and I never went back. I tried to explain my thinking, and she told me: "like you know, I'm the teacher. I did the test, and this is the way it is." …So, I just went along with it and finished [the course]. It wasn't that bad.

These anecdotes establish that Abdi does curtail his self-advocacy behavior while at the postsecondary level, and they illustrate why he may have done so.

Relationships

The students say that the relationships that they have with County personnel affect the development of many of their practices. First, I highlight those capacities that multiple students claim their relationships with County personnel promote.

Three of the students speak about relationships developing the ability to build social capital in the County program. Steven (a first gen) credits the laid-back atmosphere at the school, particularly in its faculty office space, with developing his social capital building strategies. He recalls that he could "joke around" with County teachers because they are very approachable. He notes that this atmosphere extends to the program Dean, who "is the coolest guy." Even more important to Steven is how much he feels like the Dean and the teachers "cared so much about the students" and how they "would have my back to the max" in a contentious situation. Mariama (a first gen) talks about how encouraging her BASE advisor is, referring to her as a "school mom" and thereby alluding to the closeness of their relationship. Selma's BASE advisor further offers that the "trust" Selma (a non-first gen) has in County personnel may contribute to Selma being open to building social capital with adults beyond just County. The approachable, caring, encouraging, and trusting relationships that the students experience at County mirror the relationships that researchers find at other ECDs (Miller et al., 2013; Thompson & Ongaga, 2011; Wechsler, 2001; Wolk, 2005).

Across multiple students, there is evidence that the program's relationships promote the development of the students' self-advocacy behavior. Abdi (a first gen) recalls that his BASE advisor helps him to make the "hard decision" during his first semester to quit athletics in order to benefit his schooling:

> I went to her for advice. And I told her what was happening. And she told me that: "the best thing for you right now is to quit the team." I had been thinking that, but I just needed someone to advise me.

Because he recognizes that that decision is what enables him to get credentialed to take college classes, he feel like he gets good advice from his BASE advisor, to whom he turns repeatedly in many other examples from his interviews. For instance, Abdi's BASE advisor often is a first step toward self-advocating with his teachers.

Rubie (a non-first gen) echoes that her BASE advisor also consistently prompts her to meet with teachers when she is struggling in a course. The BASE advisor for Selma, another non-first gen, offers one example that I take to explain why the students are so willing to get help from their BASE advisors. Recalling when Selma was struggling in her college chemistry class, the advisor says:

> And I just remember being, I hope from my perspective, trying to be just forgiving and positive and encouraging, when she was feeling really hopeless about it and then actually was kind of coming out of it. And then afterwards when she was successful, to help her reflect. And not let it be a lost learning opportunity.

This quote epitomizes how the students' BASE advisors are both counselors and advisors concerned with advancing the students' progress, as researchers see at other ECDs (Jordan et al., 2006; Rosenbaum & Becker, 2011).

The students delineate a number of other examples in which their relationships at County promote the development of their practices. Mariama's BASE advisor helps her to set a career goal by advocating that she use her college level courses in sociology and psychology to make sense of her ever-changing career ambitions (e.g., nursing, childcare, social work). Selma says that she finds it beneficial to work with her BASE advisor to shape her EDP and thereby "take control of what [she] needs to do" to follow through on her career goals. Steven says that having good relationships with his teachers encourages him to attend and be attentive in those teachers' classes: "When you like a teacher, you're attentive in that class… [and] you're going to look forward to going to that class." Beyond relationships with County personnel, Selma says that her relationships with older classmates develops her desire to be part of a learning culture: "Everybody is there to learn, and that's because we're surrounded by like a whole bunch of adults."

The students' relationships with County personnel, particularly their BASE advisors, transcend the levels of the program. As some of them observe, they are not required to but often do meet with their BASE advisors regularly after starting college courses. More than one student also mentions maintaining relationships with County teachers whose classes they had been in. Two stories of ongoing relationships demonstrate how that element helps the students' practices to evolve.

In the first example, Mariama (a first gen) believes that she did not pass one of her County math classes in part because she clashed with her teacher. That is, she admits to having

a confrontational communication style with that teacher, who withheld Mariana's soft skill credential in that class. Mariana talks about what changed when she had the very same teacher the next semester:

> And then I had her another semester, the semester after that. It was just like a complete three-sixty (sic). Because you know I went into class, and she still taught the same way, the tests were still the same way, she was still the same person. But I had to learn to adjust. I had to learn to, like yes, if she says something to you that you don't like, it's OK not to say anything back. It's OK to you know shut your mouth or try to redirect yourself.

Thus, Mariana purposefully revises her strategies for building social capital to be more amiable. As a result she passes both the academic and soft skill parts of the course that second time.

Steven's storyline that I wove into this chapter culminates positively because of his relationships with County personnel, thus why I position this program design element last in this write-up. Steven recalls that his hasty efforts to reach college classes through faked soft skills, and his subsequent failure of his college classes, previously left him feeling "depressed," "embarrassed," and wanting to quit the program. He recalls that he brought his dilemma to advisors at County with whom he had a relationship:

> So he said: "Why don't you just graduate next year?" And I was like: "Boss (I call everyone boss), it's embarrassing." He was like, you know, he said my name and: "How old would you be when you graduate?" And I was like: "nineteen." He said: "What's so embarrassing about being a nineteen year old with a college degree that you got for free?" Once he said that, my eyes opened. I stood up, I was so happy because he made me realize: "He's right. What do I have to be embarrassed about? This in my life. What do I have to be embarrassed about?"

Steven's relationship with his advisors validates his path through the program and encourages him to persist. Steven adds that:

> Realizing that the instructors at the school actually love me, actually care about me, is one of the bigger things and motivational factors that made me decide that I need to push myself. I need to get to university. I need to do these things.

Whether I attribute this turnaround to an evolution in Steven's follow-through, self-reliance, or social capital building behaviors, what is arguably central about this story is that Steven's relationships at County keep him on the path of a college education.[43]

[43] First gens enrolled in college reported to Reid and Moore (2008) that relationships built with high school personnel "encouraged them to attend college and made them believe they could succeed" (pp. 248-249).

Comparing the First Gens' Conception of the County Context to the Framework

In this chapter, Mariama, Abdi, and Steven, the three first gens, describe the County context, and they explain how they perceive that that context influences the development of their college ready capacities. They talk about County promoting their development and helping their capacities to evolve, which Rubie and Selma (the non-first gens) also observe. But Mariama, Abdi, and Steven go on to note that there are elements of County's program that sometimes inhibit their development or cause their capacities to devolve, which Rubie and Selma do not discuss in their cases.

I represent the first gens' conception of the County context in Table 5.4, being sure to capture their view that the program can both benefit and impede college readiness. In the same table, I also compare that conception to the list of contextual elements that appear in the initial framework. The table repeats from Chapter 2 (Table 2.2) the initial framework's list of contextual elements that scholars say affect the development of college readiness. For each of the elements that comes up in the students' stories, the table catalogues the activities, conditions, and characteristics that the first gens associate with each given element. The table then identifies the college ready capabilities that the first gens say each element affects, and the table symbolizes whether those students say that an element promotes (✔) or inhibits (✖) their development, or causes their use of a capacity to evolve (🡅) or devolve (🡇).

Table 5.4

Mapping onto the Framework the Students' Conception of the Elements of the County Program that Affect College Readiness

CONTEXTUAL ELEMENTS	IDENTIFIERS	REPORTED EFFECTS	SOURCES
Secondary			
Direct Instruction	• Teacher checks that student is using planner and course syllabi	✔ Manage your time	Abdi, Rubie
	• Teacher reminders to take out books for start of class	✔ Organize & prepare	Abdi, Steven
	• Critical thinking course	✔ Think critically	Steven, Selma
	• County personnel do not remind students to go to college classes	✖ Attend	Steven
	• Soft skills curriculum does not teach organization skills	✖ Organize & prepare	Mariama, Steven

CONTEXTUAL ELEMENTS	IDENTIFIERS	REPORTED EFFECTS	SOURCES
Assessment and Intervention	• Requiring students who want to take college courses to pass in-class and standardized exams that test content knowledge	✔ Know core content	Abdi, Selma, Rubie
	• Requiring students to be soft-skill credentialed in order to take college courses; giving students formative feedback about soft skills	✔ Self-advocate ✔ Attend	Mariama, Abdi, Steven, Rubie
	• Pulling back students from college courses into County courses when they fail college courses or lose their soft skill credential	✖ Attend	Steven
Rigor	• County courses being more academically challenging than—while still covering the content needed for—college courses	✔ Know core content	Selma
	• Students in County's English courses having to balance an independent study project with the course's regular work	✔ Manage your time	Selma
Student-Centered Programming	- - -	- - -	- - -
Social-Emotional Learning	- - -	- - -	- - -
College Advising	- - -	- - -	- - -
Postsecondary			
Rigor	• Community college courses challenging students to succeed in ways beyond what they initially thought they were capable of	✔ Build self-reliance	Selma
	• Community college professors requiring a quick turnaround on assignments, with no extensions on due dates	↑ Manage your time	Adbi, Rubie
Relevance	• Being able to take college coursework related to career ambitions	✔ Set goals	Steven, Selma, Rubie
	• Perceived norm that a student should pick a career goal as early as possible in order to start working toward a relevant degree	✖ Set goals	Steven (cf. Selma)

CONTEXTUAL ELEMENTS	IDENTIFIERS	REPORTED EFFECTS	SOURCES
Academic Supports	- - -	- - -	- - -
Ongoing Advising	- - -	- - -	- - -
Transition			
Dual Enrollment AND Secondary-Postsecondary Partnership	• Designing & executing an Educational Development Plan (EDP); signing up for community college classes; accessing the community college library, book store, and writing & math tutoring centers	✔ Navigate college systems	Steven, Selma
	• Having to keep up with volume of material covered in community college courses	✔ Attend	Selma
	• Community college faculty's responsiveness to student participation in class	↑ Attend	Mariama, Steven
	• Community college classmates' diversity of perspectives and prior knowledge & experiences	↑ Appreciate personal identity	Mariama
	• Community college courses asking students to apply, and not just memorize, course content	↑ Know core content	Selma
	• Using course syllabi; Tracking one's progress toward a degree	↑ Manage your time	Adbi, Rubie
	• Perceived norm that a student should be in community college courses by winter of First Year; County personnel do not remind students to go to college classes	✖ Attend	Steven
	• Enrollment in some community college courses of around 200 students; Faculty cold calling on students to participate or faculty being notably exasperated at lack of student understanding of course content	↓ Attend	Abdi
	• Faculty being closed off to student feedback or to perspectives not aligned with their own	↓ Self-advocate	Abdi
Relationships	• Perception that County personnel are approachable, supportive, trustworthy, and caring	✔ Build social capital	Mariama, Steven, Selma
	• BASE advisors are good listeners and encourage students to meet with and seek help from classroom teachers	✔ Self-advocate	Abdi, Selma, Rubie

CONTEXTUAL ELEMENTS	IDENTIFIERS	REPORTED EFFECTS	SOURCES
Relationships (*cont.*)	• BASE advisors help craft students' EDPs and advocate that students use college courses to explore career options	✔ Set goals	Mariama, Selma
	• County teachers create enjoyable classroom environments	✔ Attend	Steven
	• Community college students are older and create an atmosphere of maturity	✔ Be part of a learning culture	Selma
	• County teachers provide space for students to have a second chance	↑ Build social capital	Mariama
	• County personnel care about student well-being and success	↑ Follow Through	Steven

KEY: The reported effects include times when the program (a) promotes (✔) or inhibits (✖) the students' development of the named practice as well as (b) contributes to the named practice evolving (↑) or devolving (↓).
NOTE: The non-first gens' names (and any data attributable *only* to non-first gens) appear in gray text.

I make four assertions when I compare the first gens' and the initial framework's conceptions of context. In the first of these assertions, I note that the two conceptions are similar because:

- The first gens stories indicate that County incorporates seven out of the twelve program design elements in the initial framework.

I also note that the first gens talk about context in three ways that are often missing in the initial framework:

- The first gens provide detailed descriptions of the activities, conditions, or other mechanisms through which each element affects their development;
- They perceive that the elements of County's program affect the development of all but five of their college ready capacities (i.e., know yourself as a student, build self-reliance, ask peers for help, be part of a learning culture, and write well).
- They reveal that those elements can not only promote the development of college readiness but also (a) inhibit such development and (b) cause their use of those capacities to evolve and devolve over time.

Below, I review the findings from the first gens' narratives that support each of these assertions.

Parallels between the Framework and the First Gens' Conception of Context

Assertion #1. *The first gens stories indicate that County incorporates seven out of the twelve program design elements in the initial framework.* These elements are direct instruction, assessment and intervention, rigor, relevance, dual enrollment, County's joint partnership with the community college, and relationships.

The fact that the first gens say that they experience these design elements at County is perhaps unsurprising because County is an ECD, and researchers determine that the ECD model often incorporates these same seven elements (Barnett, Bucceri, et al., 2013; Barnett et al., 2015; Berger, 2007; Cunningham & Wagonlander, 2000; Edmunds, Unlu, et al., 2017; Jordan et al., 2006; Miller et al., 2013; Rosenbaum & Becker, 2011; Thompson & Ongaga, 2011; Wechsler, 2001; Wolk, 2005). Even if unsurprising, the first gens' observations are informative. That is because the literature can only predict that as an ECD County *probably* will incorporate the seven elements, whereas the students' observations make it more convincing that, in their estimation, those elements are a part of County's program.

There are, however, also contextual elements in the initial framework that the students do not report experiencing at County. According to my interpretation of what they say, the first gens appear not to experience student-centered programming, social-emotional learning, or advising on how to apply to and access a postsecondary institution. I also do not classify any of the students' experiences at County as postsecondary academic supports or ongoing advising.

However, it would be easy to reinterpret some of what the first gens say and, instead, determine that County *could* contain some of the design elements that I do not acknowledge the program having, either in my analysis or in Table 5.4. For example, scholars find that postsecondary academic supports can include college-based tutoring centers (Engle et al., 2006; Engle & Tinto, 2008; Gurantz & Borsato, 2012), which the first gens do access. I instead include those experiences as evidence of a secondary-postsecondary partnership. Those same authors also find that ongoing advising at the postsecondary level includes registration assistance and counseling related to course selection, career choices, and transferring to four-year institutions, which the first gens report doing with their BASE advisors. I include those experiences as evidence of relationships. The first gens' time at County is also arguably student-centered because County personnel attend to the students' emotional well-being (Hooker & Brand, 2009). Again, I include those instances as evidence of relationships. I cannot say based on these isolated examples that elements like academic supports, ongoing advising, and student-centeredness are present at County. However, these examples are worth mentioning in order to show that those elements may not be completely absent at County either.

Because I supplement the first gens' observations with those from the non-first gens, there is also evidence that County's courses, and not just the community college's courses, can

be rigorous, even though Mariama, Abdi, and Steven only talk about the latter being rigorous. Selma, a non-first gen, recalls that the rigor of *County's* courses benefits her development of college ready behaviors like core content knowledge or time management. In contrast, Mariama, Abdi, and Steven do not feel that they fully develop certain strategies, like using a syllabus (i.e., time management), participating in class (i.e., attending), or designing a career-oriented career path (i.e., navigating college systems), until they are faced with the rigors of dual enrolling in *community college* courses. Mariama's, Abdi's, and Steven's belief that they do not experience rigor in the secondary level of the program may be similar to how many first gens in other contexts do not take a rigorous high school curriculum and feel unprepared for college coursework (Byrd & MacDonald, 2005; Choy, 2001; Pike & Kuh, 2005; Reid & Moore, 2008; Warburton et al., 2001).

How the First Gens' Conception of Context Goes Beyond the Framework

Assertion #2. *The first gens provide detailed descriptions of the activities, conditions, or other mechanisms through which each element affects their development.* Mariama, Abdi, and Steven's descriptions tangibly depict what, from their perspective, County personnel do to enact the design elements of the program. For instance, Steven, Selma, and Rubie recall that what makes County's program "relevant" are activities like designing their own EDPs, job shadowing, and taking college coursework that both reinforces career choices that they think they will like and discourages career pathways that they learn they do not like.

To some extent, Mariama, Abdi, and Steven's account of what County's design elements look like in practice parallels how other educational programs implement the same elements, according to the research that I integrate into the initial framework. For instance, through County the students in the study can dual enroll in credit-bearing community college courses during their high school years, which fits with what dual enrollment looks like in other programs (Barnett & Stamm, 2010). The students find County's program to be relevant for the same reasons that scholars say other programs are relevant: namely because County, like other programs, gives opportunities to the students to engage in learning related to their career choices (Boroch & Hope, 2009). And, the students have relationships with County's BASE advisors and other personnel, who act as caring, supportive, and encouraging mentors, role models, counselors, and advocates much like "caring, competent adults" do in other educational programs (Hooker & Brand, 2009).

In other ways, County has some design elements in common with other programs; but according to the first gens, County implements the elements in slightly different ways than how those elements are depicted in the framework. For example, County's assessment and interventions involve monitoring and taking action based upon the first gens' soft skills credential and classroom academic performance, whereas other forms of assessment and intervention like transition courses tend to focus only on subject-matter mastery (Barnett et al., 2016; Grady, 2016).[44] In the scholarship, rigor often means high school students completing a certain number of courses in key subject areas (Boroch & Hope, 2009). Selma (a non-first gen) describes that County does that for her, but the first gens instead say that County is rigorous because their community college coursework and professors challenge them, such as by demanding that they complete assignments on a quick schedule. The descriptions of direct instruction in the scholarship are often vague (Levin, 2012), whereas the first gens specify that for them direct instruction consists of County personnel (a) prompting students to exercise certain behaviors (e.g., use syllabi, go to class), and (b) delivering curriculum designed to teach particular behaviors, like soft skills or critical thinking. Finally, like other joint secondary-postsecondary partnerships, County and its affiliated community college (a) afford the first gens the resources available in both settings, (b) acclimatize them to the norms and procedures of college, and (c) expose them to professors and fellow college students who challenge them to think differently and work harder. However, the students also highlight that County's and the community college's physical locations, systems, and communities are almost seamless, whereas other such partnerships often involve the postsecondary entity bringing isolated services to high school students or bringing those students to the postsecondary environment for truncated, targeted activities or events (Barnett et al., 2012; Boroch & Hope, 2009; Hooker & Brand, 2009).

Assertion #3. *The first gens perceive that the elements of County's program affect the development of all but five of their college ready capacities (i.e., know yourself as a student, build self-reliance, ask peers for help, be part of a learning culture, and write well)*. Table 5.4 lists which individual capacities the first gens say that each element of the program affects.

In order to summarize what effects the first gens think that the program has, I point out some discernable patterns. The first gens indicate that two of the three "R's" at County—

[44] Moreover, none of the literature about other assessment and intervention systems, including the research about ECDs, mentions what Steven experiences: requiring him to stop taking college courses and return to County classes whenhisperformance starts to wane.

relevance and relationships—are the elements that most often affect their development of self-advocacy, building social capital, goal setting, follow through, and building self-reliance. These are noncognitive behaviors through which they take ownership of their learning. The first gens indicate that direct instruction and dual enrollment are the elements that most often affect their development of time management, attendance, and organizing & preparing: the students' noncognitive learning techniques. The first gens further report that dual enrollment also is the element that most often affects their development of college knowledge related to navigating college systems and appreciating personal identity. Though no one element seems to affect the first gens' development of all (or even most) of their academic capacities, Mariama, Abdi, and Steven credit direct instruction with developing their critical thinking, and they attribute knowing core content to assessment and intervention.

The connections that the first gens make between the County context and the development of college ready capacities are more specific than links that appear in the initial framework. The research underlying the framework tends to measure if an educational context affects either postsecondary outcomes or "college readiness" as an abstract concept; or when they do determine that a context affects college ready capacities, scholars define those capacities broadly or talk only about categories of capacities (Hooker & Brand, 2009; Struhl & Vargas, 2012; Warner et al., 2016) (cf. Grady, 2016; Karp et al., 2012; Tate et al., 2015). Moreover, other research demonstrates that the ECD model can affect college ready behaviors like goal setting, self-reliance, attendance, time management, and knowledge of core content, but that literature often does not indicate what element of an ECD's design might have such influences (Cerrone et al., 2013; Edmunds, 2010; Jennings et al., 2007; Ramsey-White, 2012; Tate et al., 2015; M. M. Williams, 2014; Woodcock & Beal, 2013). In contrast, the first gens' narratives suggest that *particular, identifiable* elements of County's program design can, in their view, affect the development of *particular, identifiable* college ready capacities.

Selma and Rubie, the non-first gens, talk about County influencing many of the same college ready capacities that the program affects in Mariama's, Abdi's, and Steven's stories, and Selma in particular also adds to the first gens' conception of the County context. Specifically, she mentions that the program's rigor helps her to develop her capacity to build self-reliance, and she says that her relationships with students attending the community college encourage her to be part of a learning culture. Though the first gens state that they think those capacities are

important to their practice, they do not talk about County teaching those capacities, thus leaving it to Selma to fill this particular gap in our understanding of the County context.

Assertion #4. Another distinction between what the first gens' and the non-first gens' experience at County is that, from Mariama's, Abdi's, and Steven's perspectives, *the elements of the program that they discuss not only promote the development of college readiness but also (a) inhibit such development and (b) cause their use of their capacities to evolve and devolve over time*.

Starting with the former, the first gens note that direct instruction, assessment / intervention, relevance, and dual enrollment at times inhibit their development of behaviors like goal setting, attendance, and organization / preparation. Steven, for example, is particularly critical of the ways in which he perceives that County inhibits his development. He faults the program for failing to take certain actions, like not offering "enough" direct instruction in organization / preparation skills. He also says that he felt "rushed" to dual enroll in college coursework and then "embarrassed" after the program pulled him out of those college classes when he performed poorly, and he says these "problematic" parts of the County context inhibited his desire to attend school.

In addition to suggesting that the County program inhibits the development of their college readiness, it is primarily the first gens who provide evidence that their capacities can evolve, or even devolve, over time in the program. The first gens report that rigor, relationships, and dual enrollment—particularly when they occur within the postsecondary level of the County program—play a role in the evolution of their behaviors like time management, attendance, goal setting, building social capital, knowing core content, and appreciating personal identity. Steven's narrative, woven throughout this chapter, is perhaps the best example of how the students describe their practice development as evolving. He talks about faking his way through the direct instruction of noncognitive skills in the early years, facing the consequences for having done so when he dual enrolled, and choosing to persist after getting help from his ongoing relationships with his County advisors.

In contrast, Abdi reports that dual enrollment contributes to his attendance and self-advocacy behaviors *de*volving. He gives two reasons why he uses these capacities less than he did when he was in County's classes. He says that the large number of students in his community college classes makes him hesitant to participate (one of the strategies the students associate with

attending), and he indicates that some of his professors respond defensively to students who advocate for themselves.

Interestingly, it is exclusively Abdi, Mariama, and Steven—the three first gens—who talk about elements of the County program inhibiting or devolving their college ready capacities. In contrast, Selma and Rubie—the two non-first gens—recall only how elements of the county program promote and evolve their college ready capacities. As an example of the latter, Selma indicates that, while she came out her County classes knowing core content, it is her community college courses that challenge her to apply, and not just memorize, content knowledge.

There is nothing in the framework that anticipates that the first gens would talk about County inhibiting their development, and there is little in the framework that explains why it is particularly Mariama, Abdi, and Steven (and not Selma and Rubie) who have such experiences. Some of the scholarship on which I base the framework does establish that, for first gens especially, there are elements of educational programs that, when *missing*, leave students less ready for college. For instance, first gens perform worse than their non-first gen peers in college when the first gens' high schools do not provide a rigorous curriculum or do not directly teach certain noncognitive and academic behaviors like time management or writing skills (Pascarella et al., 2004; Reid & Moore, 2008; Warburton et al., 2001). Steven and Mariama make a similar claim that County's soft skills curriculum leaves them underprepared for college.

Alternatively, extant research also considers that postsecondary institutions can create barriers to student success when they fail to acknowledge—or worse, supplant and devalue—the background characteristics, norms, and forms of capital that underserved students, including first gens, bring to college (Castro, 2013; Majors, 2019; Mamiseishvili, 2012; Stephens, Fryberg, et al., 2012; Welton & Martinez, 2014). Without knowing how Mariama, Abdi, and Steven's communities affect their development of college ready capacities (which I provide in the next chapter), it is too soon to determine if County discounts (or embraces) community as a partner in developing the first gens' readiness.

The ideas that educational programs can contribute to college ready capacities evolving or devolving are also absent from the initial framework and the literature. Very little research thinks about students using identifiable strategies to support their college ready behaviors and attitudes (Karp, 2007, 2012; Karp & Bork, 2014). Thus, I found no literature that thinks about students developing new strategies over time, or about students using their strategies more/less

often or in new ways over time. Whereas, the first gens in this study have those types of experiences, such as when dual enrollment teaches Mariama and Steven to not just attend class but also be more attentive and participate more, or when Abdi participates less when he dual enrolls (as discussed just above).

Possible Answers to Prior Questions and New Unanswered Questions

In this chapter, the students' narratives provide insights into why they conceive of college readiness as they do in the previous chapter. Simply put, the college ready capacities that the students think are important are, with only five exceptions, ones that the County context helps the students to develop. For example, this is evident when we consider why the students in the study speak at such length about their noncognitive capacities being important to college readiness. One explanation, which the students reveal in this chapter, is that County personnel commit a number of design elements to developing noncognitive behaviors. These include direct instruction in soft skills, requiring the soft skills credential (i.e., assessment), and one-on-one guidance from BASE advisors.

As in the last chapter, however, the students' narratives still leave us with lingering questions. Namely, why do only the first gen students report that the County program inhibits their development or contributes to their capacities devolving? And, might the first gens at times feel like they are less than college ready because County's culture sends signals (through elements of the program) that something inherent to them makes them less ready? Thus, while the first gens explain how the County *context* can affect their development of their *capacities*, we do not yet know how *community* factors like first gen status may also influence their development of college readiness. Nor do we yet know how context may mediate or moderate community's effects. In the next chapter, I turn my attention to both of these issues.

Chapter 6 - Community

Introduction

In the preceding chapters, we learn two types of information about the students in this study that enable me to reflect on the initial framework. Namely, the students' emerging narratives reveal which capacities they associate with college readiness and which parts of the County context they think affect their development of those capacities. Because the first gens in the study have negative encounters in County's program that the non-first gens do not, I next consider if their lives outside of school affect their process of developing college readiness. I do so because, according to the framework, community factors like first gen status can influence students' transitions to college as well as their postsecondary experiences and outcomes.

In this chapter, I specifically investigate how the students' communities influence the development of their college ready capacities. I direct this exploration using the study's third research question:

> What factors in participant students' communities did they indicate affect their development of their practices?

In summary, the students indicate that the following factors affect their development of college readiness: family, first gen status, race, familial income, country of origin, and part-time employment. The students indicate that these factors affect the following behaviors: self-advocacy, building social capital, goal setting, time management, attendance, organizing / preparing, critical thinking, navigating college systems, appreciating personal identity, and being part of a learning culture. While all of the students contribute stories in which the preceding community factors promote the development of these capacities, Mariama, Abdi, and Steven (the first gens) talk more often than Selma and Rubie (the non-first gens) about how some of those same community factors also inhibit their development of their college ready capacities.

There are three levels to my analysis of this data. Mindful of how the first gens' experiences overlap with and differ from the non-first gens' stories, I first spend most of this chapter summarizing Mariama's, Abdi's, and Steven's conception of how community affects the development of their college ready capacities. I then spend the second part of this chapter comparing and contrasting that conception against the list of community influences in the initial

framework. Third, I end by raising important questions about how County's contextual culture and the first gens' community cultural capital might simultaneously affect Mariama's, Abdi's, and Steven's development of college ready capacities.

Participating Students' Conception of How their Communities Affect their Development of College Readiness

The students state that, alongside the County program, their communities also influence their development of college ready capacities. Recalling Table 5.1 and 5.2 in the prior chapter, the students spend on average over a quarter of the discussion concerning the influences on their development talking about the impact of factors in their communities. The students indicate that six community factors affect their development: family, first gen status, race, familial income, country of origin, and part-time employment. Of these, family is the only community factor that all five students discuss. I organize this chapter so that I report on each of these factors in turn.

I summarize my findings in Table 6.1. The first column of that table lists the community factors that the students discuss. The table also lists the capacities that the students say that each factor affects. In the third column of the table, I note whether the students believe that a community factor either promotes (✔) or inhibits (✖) their development of a specific capacity, and I quote at least one of the students in order to illustrate *how*, according to the student, that the community factor affects each associated capacity.

Table 6.1

Students' Conception of Their Community Factors that Affect College Readiness

Community Factor	**Behaviors & Attitudes**	**Promoted (✔) or Inhibited (✖)**
Family & *First Gen Status*	Self-advocate / Ask peers for help	✔ "It just helps me because I know that if [my sister is] good and she can do this, you know, college thing and just the whole new life away from the family, then I can too." (Mariama)
		✖ "*I've done everything with school. Like filling out all of my papers and making all the decisions as far as my future… I say to my mom, you don't know…. Yeah, sometimes I get frustrated when I need to figure out what this means, what's this about, what's that.*" (Mariama)
		✖ "I mean I didn't really talk to my math teacher that much because of my schedule. The teachers have like certain office hours, and I couldn't do it after school 'cause I would have missed my bus." (Rubie)

Community Factor	Behaviors & Attitudes	Promoted (✔) or Inhibited (✖)
Family & *First Gen Status* (*cont.*)	Self-advocate / Ask peers for help (*cont.*)	✖ "*One thing that like other people had and I didn't was, you know, a parent helping. Because like most of my friends I know like their parents are like professors or like doctors [to whom my friends turn] if they need help. I think they like to tell them, you know: 'college is this and this*.'" (Abdi)
	Attend	✔ " In the morning, my mama always… came to me and like I had to get up an hour earlier. And… now I wake up an hour earlier." (Abdi)
		✖ "Oh, yes. Sometimes I did struggle with attendance because my mom would make us walk to the bus stop." (Rubie)
	Manage your time	✔ "[My mom] used to tell me: 'you have this day; it's never coming back again'… [and] 'You can do a lot in that five minutes'" (Abdi)
		✔ "She works. She cooks for the family. She goes and gets the groceries. She gets the kids' clothes ready for the school.… I realize it's a lot of work. I realize you know she's managing her time." (Abdi)
		✔ "Her mom… wanted her to take more class credits…. [M]om's priority was really to make sure that that they were able to maximize what they got out of the school." (Selma)
	Think critically / Appreciate personal identity	✔ "They haven't had the chance to kind of like become neighbors with them. And my family has and what's really great is like we've learned each other's languages." (Selma)
		✔ "What my religious community has taught me is instead of getting angry at everybody and like telling them that they're wrong, try to educate them about like the good things…. I feel like that's something that I can carry on with me to college" (Selma)
		✖ "*When you're the first person to go into a college environment, … your families probably don't have the most open minds or probably don't have the most knowledge about a lot of things*." (Steven)
	Set goals	✔ "My brother, he was diagnosed with autism. And [the doctors] really kind of helped him through that. My sister she has epilepsy. I've seen like the doctors they're like were able to help her out and it's, I kind of look up to them." (Selma)
		✖ "*There's a higher chance that you won't be successful if you are the first one who would graduate from college in your family. There's a higher chance that you will do the same mistake that your family did growing up" by accepting the standard of living they were accustomed to*. (Steven)
	Be part of a learning culture	✖ "*Being the first in your family to go to college… My parents tell me all the time 'you know, you're still a high school [student].' Like they don't understand that…I'm a college student*." (Steven)
Race & Familial Income	Organize and prepare	✖ "I'm African-American and… when you live in a low-income society, or when you're coming from a background where your parents didn't go to college, …we're not getting pushed on our back to study." (Steven)
	Build social capital	✖ His perception of police in his neighborhood may have contributed to his early hesitance with getting to know authority figures, which included teachers (Steven)

Community Factor	Behaviors & Attitudes	Promoted (✔) or Inhibited (✖)
Country of origin	Set goals	✔ "I want to work here while I get me degree in business, but my ideas are really way beyond here. It's in my, you know, back in my country." (Abdi)
Part-time employment	Manage your time	✔ "I work those two days to pay for my gas and for a couple of bills." (Abdi)
	Appreciate personal identity	✔ "[I have provided customer service to people with] different attitudes, ethnicities and just, I mean it's, I've learned people tell me stories all the time when they're waiting in lines." (Selma)

NOTE: The non-first gens' names (and any data attributable *only* to non-first gens) appear in gray text.

Family

When cataloging the influences that the students say that family has on their development, I include any actions (or lack of action) that the students say that their family members take. I also include any characteristics of their families' home living environments that the students describe. I further include any of the students' family members' beliefs or identities that the students think may affect their development (O'Shea, 2016; Yosso, 2005).

Family Promotion of Development. Below, I relate the students' descriptions of how some of their families' actions, environments, or beliefs promote their development of practices. In order to make an assertion later in this chapter, I also report when the lessons the students learn from their families does and does not match with what the County program teaches them.

For example, Mariama (a first gen) declares that she develops behaviors like asking peers for help and self-advocacy thanks to her older sister, an undergraduate student at a large four-year public university. She note that she and her sister are "like two peas in a pod" for their similar strengths and weaknesses as students. Because they were so similar, Mariama says:

> So, when she tells me what she does, it helps me. Because, I'm like thinking like you know, if that helped her get through, it's probably going to help me too…. It just helps me because I know that you know if she's good and she can do this you know college thing and just the whole new life away from the family, then I can too.

Specifically, Mariama recalls how she learns from her sister's shared struggle with social anxiety. She notes that, through her sister's example, it becomes clear that successful college students develop peer social networks to support them academically and socially. Perhaps as a result, Mariama tells me that at County she uses social media to reach out to classmates to help her understand course material.

Mariama also says that her sister's experience at a large university reinforces the need to self-advocate and build social capital with college faculty in order to be "successful in my

classes." Her sister's advice convinces her to use self-advocacy to go "the extra mile in showing teachers you're serious." This is a behavior that Mariama recalls the County program emphasizing, as well. Rubie (a non-first gen) reports that she too learns to self-advocate from a family member. Rubie says that, once when she was performing poorly in the college class because the professor stopped holding class sessions and suddenly started using an online course format, her mother directly prompted her to reach out to County personnel for help managing the situation.

Abdi (a first gen) reveals that his mother offers lessons and models behaviors that promote the development of his attendance and time management behaviors. Starting with the former, Abdi talks about how his mother helps him engage the strategy of building in extra time so as to enable his other strategy of being physical present for class:

> In the morning, my mama always, like when we first moved to America, she came to me and like I had to get up an hour earlier. And I would always say: "mom, we have an hour before school." But now I wake up an hour earlier. She doesn't tell me to get up. It's just something that I have to do and I do it.

Here, Abdi alludes that his mother reinforces the importance of physical attendance that the County program also stresses. Namely, he says that he realizes at County that "attendance is one of the important ones" because he would otherwise miss out on lecture notes.

Abdi reports that his mother's prompts to wake up in the morning not only develop his attendance behavior but also his time management behavior: "In the morning, like it's hard for me to wake up. I always say to her: 'Five more minutes.' [And her response is:] 'You can do a lot in that five minutes.'" Adbi also says of his mother:

> Time, like that is something that I learned from my mom. She would tell me you know to always take care of time. Because she used to tell me: "you have this day; it's never coming back again." And used to be: "OK" (i.e., dismissive). But now I realize, you know, one choice that you make can affect your whole life. Like the second something is over, it's not coming back again.

In these two recollections, Abdi establishes that his mother develops his time management strategies related to taking advantage of the present moment, such as when he gets ahead on upcoming tasks during unscheduled time or has schoolwork tools (e.g., his laptop) available for down times in between activities. These time management strategies are ones that he tells me the County program develops in him when he has to keep up with the accelerated pace of assigned essays in a spring college English course.

In addition to what she teaches him, Adbi says that his mother also models time management in how she, like he does, designates specific times for different activities. He recalls:

> She works. She cooks for the family. She goes and gets the groceries. She gets the kids' clothes ready for the school. She gets up in the morning. I realize it's a lot of work. I realize you know she's managing her time.

Here, Abdi's mother's time management practice mirrors what his County BASE advisor counsels him to do when he has to balance school with other activities like athletics: "After I quit the team, everything got better. It just taught me that… you have to have time for your homework…. Not just homework, anything."

Selma's family also directly and indirectly shape her development; and like Abdi, Selma's mother promotes the development of her time management behavior. Specifically, Selma's BASE advisor recalls that Selma initially followed her mother's lead when designing her EDP (i.e., degree course pathway):

> I know she and her mom, who was very supportive and very involved, …wanted her to take more class credits…. [M]om's priority was really to make sure that that they were able to maximize what they got out of the school.

When the BASE advisor and the County Dean explained that there was no benefit to accumulating more than 60 credits, the advisor recalls that Selma was "receptive but frustrated." Ultimately, Selma designs her course load to reflect a time management behavior that both her mother and her County relationships help to develop. That is, she does achieve enough credits to earn two associates degrees, yet she also makes time for extracurricular involvement and self discovery, as discussed in Chapter 5. Thereby, Selma sees the influence of her mother and the County program as compatible.

Indirectly, Selma's family develops her critical thinking behavior and appreciation for personal identity. Her family facilitates her travel to Israel / Palestine, where she reports exploring and hearing both viewpoints on the conflict between those two peoples:

> But I've only been looking at it from my perspective and I haven't really like kind of looked at like what the Israeli side has had to say about it…. I think that if everybody just takes some time to really listen to each other it would be a much better place over there definitely.

Inherent in her story about her time with family during her Palestinian/Israeli travels is developing the strategy of not only seeing both sides but also considering nuances within a given

side. She recalls having visited both her family's location within Israel and then Ramallah in the West Bank. She contrasts those two locations, and she says that the latter exhibits:

> Yeah, a lot more separation. And I thought it would be like that in all parts of the country but it was… it's really just I feel like it's like that in the West Bank because they haven't had the chance to kind of live with Israelis. Like they haven't had the chance to kind of like become neighbors with them. And my family has and what's really great is like we've learned each other's languages. Like all of my uncles speak Hebrew. And when you walk around, if you speak to an Israeli in Arabic, like they'll understand what you're saying. And so like they've taken the time to learn about our culture and likes we have. And that's what I mean by I'm so frustrated by this because it's still continuing. But I mean if we've been able to prove that we can co-exist peacefully then why not do that all over.

Here Selma recognizes that context (i.e., two distinct Palestinian communities) have the power to shape how individuals perceive the same broader condition (i.e., the relationship between Palestinians and Israelis). Selma determine that, through this travel opportunity, her family supports the same behaviors around critical thinking and appreciation of personal identity that the County program does. For instance, Selma credits a County social science class with developing her strategies of "looking at both sides of like any type of conflict or dispute" and "need[ing] to not be so focused on a set of values."

Selma's family also brings her into an Islamic faith community, and she discusses how she learns from that community how to relate that part of her identity to others:

> Yeah. I think especially with Islam, there's a lot of automatic, like, stereotypes that kind of follow with that. And so, what my religious community has taught me is instead of getting angry at everybody and like telling them that they're wrong, try to educate them about like the good things. And like I mean it's a beautiful religion honestly and so I feel like if you come off in a negative vibe when someone comes at you for your religion then that just proves their point, not yours. So you have to kind of teach it to them.

Selma adds that this is a strategy for communicating about identity that she could carry forward: "I feel like that's something that I can carry on with me to college. Because I mean like not everybody's going to have the same viewpoint." Just as her family's faith community teaches her, Selma reports that the County program gives her similar encouragement to explore and express her personal identities: "And I feel like when you go off to college, you should have some sort of identity of like who you are and what you want to do for this world. …And you know I think the great thing about clubs [at County] is that you… can really be yourself when you're in it."

Selma's family indirectly develops her goal setting behavior when they bring her into contact with her professional career interests. Namely, she is exposed to doctors, and she recalls:

> [L]ike my brother, he was diagnosed with autism. And they really kind of helped him through that. My sister she has epilepsy… I've seen like the doctors they're like were able to help her out and it's, I kind of look up to them. And I know that a lot of them studied [at the state flagship university]. And so my the reason I want to go there so much is to be able to do what they do and to also give back to like [the university's city] and the community.

This exposure may teach her to set professional goals in part through first-hand experiences. As I recall her telling me in Chapter 5, Selma does something similar at County in that she takes college science courses and earns two general studies associates degrees that respectively facilitate her choosing her career in medicine.

Family and Familial Education Levels as Inhibitors Of Development. The students share evidence that family not only promotes their practice development but, in their minds, also inhibits it. While they note a range of familial actions, environments, or beliefs that they say inhibit their development, the first gen students observe that their parents' levels of education, in particular, inhibits their development. Again, as I recall what the students say about inhibitors in their community, I report whether those community factors teach them something similar or different than what they learn at County.

Rubie (a non-first gen) recounts disruptions that inhibit her development of college ready capacities. One such family factor is regular instability in where she is living. Recalling a recent semester, she shares:

> 'Cause a lot of what was going on with me was like out of my control. I had actually moved like four times that year in between my mom's house and my dad's. My dad had to go to New Jersey for training, and my mother and I don't get along so well. So it's kind of a struggle.

She offers this fact as we discuss time management, alluding that these moves between homes disrupt her ability to make time to do her work. To counter this familial influence, she turns to her BASE advisor and County's Dean, and they counsel her to do work in between class times:

> I just made sure I was getting stuff done. Like finding time to do stuff out of school. I mean like after school, like in school, that's what I think I did. Because it was hard for me to like do stuff at home.

In these two statements, Rubie exemplifies how the time management development that she receives at home contrasts with the advice about that behavior that she receives at County.

Another ongoing disruption to Rubie's practice development is her family's options for transporting her to County. Specifically, her transit to the program inhibits good attendance practices:

> Oh, yes. Sometimes I did struggle with attendance because my mom would make us walk to the bus stop. To take the city bus in, you know, that has a lot of stops. And I had to get on another bus to go to school. So I had to get on one bus, go to the [nearby city] transit center, you know, to take another bus to school.

In contrast, the message she hears at County is that class attendance is instrumental to success: "[Having been absent] kind of did really seem like a serious because [the professor]… said you know the more you missed, the harder it is going to be to pass the class."

Rubie adds that her need to use public transit further inhibits her practices around self-advocacy:

> I mean I didn't really talk to my math teacher that much because of my schedule. The teachers have like certain office hours, and I couldn't do it after school 'cause I would have missed my bus.

While it is likely that a number of conditions may necessitate that Rubie use the buses, I note that she says that she has to use that option "because my mom would make us." In contrast, what Rubie does to clarify her transit issue with County personnel promotes her development of self-advocacy:

> But once I started advocating for myself, because I live in Detroit, so it you know takes a while to get to school. So when I started to advocate for myself, you know, it started to become less of a problem for my soft skill grade. They realized that I wasn't just late for class because I didn't care or I was trying to skip out of class or you know.

By responding positively, the County personnel emphasize to Rubie the benefit of self-advocacy.

Mariama (a first gen) reports that she has a hard time self-advocating with her parents, particularly when it comes to soliciting their help with navigating college systems:

> I've done everything with school. Like filling out all of my papers and making all the decisions as far as my future, I'm doing everything and. I also I think they check on my grades but I'm the one who's tracking them and making sure they're OK. My mom's always checking on me and asking questions. But I say to my mom, you don't know. I'm the one… I signed up for my classes on my own, I make sure everything is set in stone, I check all a teacher to make sure they're good for me. I go to my advisor…. Because, if I don't do it, then it's not going to be done. Yeah, I really want things, so I have to suck it up and get it done. Yeah, sometimes I get frustrated when I need to figure out what this means, what's this about, what's that.

Neither of Mariama's parents attended college, and she alludes here that the fact that they "don't know" about college "frustrated" her ability to receive their guidance about college. In contrast,

Mariama recalls numerous instances when she has self-advocated successfully while at County, thereby reinforcing to her the merit of that behavior.

Despite the praise he has for his mother earlier, Abdi like Mariama (both first gens) feels that his mother's lack of formal education has an impact on his ability to navigate college system. He states:

> One thing that like other people had and I didn't was, you know, a parent helping. Because like most of my friends I know like their parents are like professors or like doctors [to whom my friends turn] if they need help. I think they like to tell them, you know: "college is this and this." They tell them the stories you know about the experience and stuff…. [I]t would be great to have like someone who had a college experience who would tell me about it, you know, if I have a question, what kind of teachers, what type of teachers [to take class with].

While Abdi does not say so explicitly, he like Mariama seems to have less opportunity to self-advocate at home. In fact in his case, his mother's low level of education and limited English language proficiency necessitate that he is the one who had to help her:

> My mom doesn't speak a lot of English. We're not from here [from Somalia]. We came here [in] 20**. I live with my mom, and I don't think she ever went to school. So I fill out the papers, the bills, and I do all that stuff.

As he tells me in the previous chapter, Abdi feels he has much more opportunity and encouragement for self-advocating within the County program: "You have to have a meeting every two weeks with your teachers… and if you don't, they put comment in your" grades.

Of the three first-gen students, Steven offers the most commentary about how his parents' levels of education had an impact on his practice development. He argues that his parents' lack of experience with and knowledge of college contributes to them not helping him be part of a learning culture. He argues that it is "risky as the first child" to attempt a college education because:

> [Y]ou go in to college feeling so alone; so like, man, like, you know, you don't really have anyone to look up to. Especially if you're come from a community where I live, you know, and everyone in your community is the same as you. Where in all of our families, the school pressure… the school importance only goes to them dropping us off at the door. When that's all you're around, like you aren't going to learn anything.

He adds that his parents do not fully grasp the ways in which the ECD's program integrates postsecondary elements:

> Being the first in your family to go to college and especially go to a school like this… My parents tell me all the time "you know, you're still a high school [student]." Like they don't understand that my high school… even though I am a high school student, you

> cannot say that I'm a high school student. I'm a college student. You know, I think they don't necessarily understand that.

He indicates that his parents specifically do not seem to comprehend that, in the program, Steven mostly followed the "rules" (i.e., norms and procedures) set out by the community college. In contrast, Steven's storyline in the previous chapter exemplifies how, even when he wanted to quit, County personnel push him to extend his learning and earn a degree.

Steven claims that his parents models study behaviors and attitudes that he believes are insufficient for postsecondary success. He associates the fact that his parents "didn't study regularly growing up" with both their lack of awareness of what it takes to do well in college and their dismissal of the fact that doing so is a step toward improving one's life outcomes. He elaborates:

> I'm trying to say that like, there's a higher chance that you won't be successful if you are the first one who would graduate from college in your family. There's a higher chance that you will do the same mistake that your family did growing up. Because if they do not change and become successful after high school, you're seeing… how you're living and you're doing fine. You know if you put in that same amount of effort that got your family into that same predicament. It's kind of like you're following their shoes.

Here, Steven alludes that his family passes on to him not only complacency around college ready study behaviors but also a propensity to not set lofty goals related to educational attainment. Steven's BASE advisor juxtaposes Steven's own drive with the goal-setting Steven claims that his family models. Namely, the advisor recalls that Steven uses the program to explore and pursue a number of "bigger picture, longer term" goals. To illustrate this point, Steven has the ambition of becoming an entrepreneur and sees school success as instrumental to that goal, as of when he and I spoke.

Steven goes on to discuss the impact that his family has on his critical thinking behavior. He contrasts his familial influence with how the ECD program teaches him to be open minded, stating:

> [W]hen you're the first person to go into a college environment, it could be risky in terms of like them [parents] not being able to help you at all. They don't know much about it. A lot of times you feel like you can't talk to them about it because they don't understand. Or you know they haven't been there, especially if you're coming from a low-income society where your families probably don't have the most open minds or probably don't have the most knowledge about a lot of things. And then when you have a school whose teaching, where your education is phenomenal. It kind of puts you—I don't want to say a different level or a different box—but kind of puts you in a different thought than your family is in in terms of what you know, in the terms of how you act, and those things. It

> really does really does, can hinder, especially being at [County] with them teaching you all about open minds.

Within this quote, Steven talks about his belief that his parents' levels of education limits their critical thinking skill. And in the same quote, he says that he has the opportunity to expand this behavior within the County program.

Race and Familial Income

As with some of his quotes above, Steven frequently conflates the influences that first gen status, race, and familial income have on his capacities as a student. While difficult to tease apart, he is the only participant student who raises these latter two community factors when discussing the development of his practice: hence why I present these two factors together.

In one instance, he reiterates his belief that these three factors are somehow tied to families in his community not advocating that their children develop positive study strategies. He says:

> I'm African-American and… when you live in a low-income society, or when you're coming from a background where your parents didn't go to college, or things like that, it's not to say that they don't necessarily care about your education. But them caring and them pushing you goes as far as them dropping you off at the school doors. Besides that, when you get home, they're not, our families are not on our back. Obviously, you know, they tell you to do your homework…. But like doing your homework is only fifty percent of it. Studying is what it is: we're not getting pushed on our back to study.

He perceives that the community norm of having children at a young age may affect his parents' educational attainments and attitudes: a norm he associate particularly with his community being majority African-American. In his words:

> My father never got… he did not graduate from high school. I believe he has his GED now, but he did not graduate from high school. My mother my mother managed to finish high school. A big problem in these low-income communities—not even in low-income communities but African-American communities, in the black community—are a lot of our families had children at young ages. And so, and so because my parents had me at a young age—my mom was sixteen was she had me. And that put on a lot of, a lot of stress on the family because in a way it's kind of a child raising a child, you know.

To Steven, the influence of these community factors on his independent study habits contrasts with the ways in which he experiences the County program. For instance, he recalls that County's literature and English curriculum teach him to study with flash cards and help him in "being able to analyze the text and taking a different perspective and making connections. Those, like, helped so much."

As its own factor, Steven indicates that him living in a majority African-American community and him being black inhibits his development of social capital building. He notes that his perception of police in his neighborhood may contribute to his early hesitance with getting to know authority figures, which includes teachers. He says that the officers who police his neighborhood are not from that community and did "not know a lot about the community." He states that this made him less trusting of police and, by extension, other authorities.

In contrast, Steven later says that he finds it easier to relate to the majority white County faculty because of race-based norms that he internalizes:

> As a black person, you know, we feel really good when we hear a white person standing up for us. A lot of people don't understand the way that makes, you know, a black… a young black male feel when you hear another [sic] white man call you brother or say something like that. Oh, man, it's just so, it's a crazy feeling because, when you're taught—not that we're not explicitly taught—but implicitly taught that you know white people, white males are above you in a way, you know, you have to look up to them in a way. And when they put themselves on the same level as you or defend you, it makes, that right there: immediate relationship.

Steven goes on to say that he may be "implicitly taught" this attitude of racial self-deprecation, and he points to how the student population in the County program is perceptibly different from his racial (and socioeconomic) background. He suggests that, early in the program, he began to experience in his words "internalized racism." He describes this phenomenon in the following way:

> You know being one of two black people in your classes, I think that for one was a problem with that is you… I don't want to say lose your culture, that's definitely not the word. What you find beautiful and what you find to be amazing and great, starts to not be your culture, it starts to be other cultures. … There comes to a certain point where everyone that you are around, that they are white, and you're enjoying the things that they do.

Steven's idealization of "white" culture manifests most obviously, he says, in his choice of a white romantic partner. While Steven indicates that the above conditions that he perceives at County enable him to build social capital with County personnel and classmates, I interpret that he clearly implies that the loss of his culture is an unacceptable way of doing so that should be avoided.

While he internalizes what he identifies as white cultural norms, Steven feels alienated from the higher income status that he perceives as the norm among his fellow County students. He states that:

> You should be careful… coming from a low income community to a higher income community because you feel judged… when the people around you have more money than you or live in a lot different situation as you. And so you know it is really embarrassing, and for me I was very embarrassed. And it led to me lying about a lot of my life because of it.

I include this observation from Steven, as well as the prior one about internalized racism, despite the fact that they are a departure from determining how community influences Steven's development of practice. Rather as I will discuss in the final chapter, these observations highlight two ways in which Steven perceives that the County program responds (or rather, does not respond) to his cultural identities.

Country of Origin

As he states above, Abdi had emigrated from Somalia with his family as a child, and his homeland features prominently in promoting the development of his goal setting behavior. Abdi plans to use his education and monetary earnings in the US to launch a business career in Somalia. As he puts it: "I want to work here while I get me degree in business, but my ideas are really way beyond here. It's in my, you know, back in my country."

Abdi's motivations for this goal are a combination altruism, national pride, and financial, and yet these factors all have an impact on his educational aspirations and degree choice of business. In order, his first motivation is to start businesses in Somalia for the benefit of others:

> You know, where I'm from, the people can't get employed. I want to go back and help people get employed. … Like the country needs a lot. I'd like to be a doctor or something like that, but the reason I'm doing business is because business is what builds up the country, that's what I learned. I used to think it was government and stuff. But once you employ people, they have jobs, you don't have to worry about like a lot of stuff.

He also thinks of himself as Somali; and as a member of that nation, he wants to protect his people's self determination of their economy:

> In the state where I'm from, the place I'm from—it's in the northeast. There's a lot of oil in there. But no one has a good knowledge really how to take it out, and we don't want other foreigners to come in and take it out because we don't like trust them. And once I learn business, I can be the head and I could get the companies moving there.

Lastly, Abdi alludes to desiring financial gain: "I know a couple people; a couple of my uncles who were like Uber drivers here. Now they're making millions. They sell like clothes and like little stuff that goes up high."

In this last quote, Abdi reveals how his origins in Somalia and his family often work as congruent influences on his goal setting. In this instance, he names his uncles in Somalia as

those who shape his goal to return there to conduct business like them. Abdi adds that his mother further shapes his goal setting:

> The only reason I'm here [in the USA]… people ask me: "why do you do business?" I had this goal… Like my mom is always telling me: "you know, we are here to learn, but this is not my place." I'm just here to learn and get what I need from and, you know, go. That's just my goal, you know. Get my education, you know, and go back to my place.

While Abdi does not recall any ways in which the County program affects his individual goal, the students participating in this study make clear in this and the preceding chapters that the program applauds setting one's sights on a college education.

Part-time Employment

Abdi (a first gen) and Selma (a non-first gen) speak briefly about one additional community factor that influences their development: having part-time jobs. Abdi recalls that his part-time job promotes his development of time management. Abdi's financial need requires him to work and therefore learn the strategy of setting aside time each week for work: "I work those two days to pay for my gas and for a couple of bills." Abdi notes that the County program emphasizes the need for an effective time management behavior. For instance, he says: "I learned that time is important. If you mess around with time, you won't go anywhere. Because I know people who still take [County] classes all because they don't use their time well."

Selma leverages her part-time job to develop her strategies for appreciating personal identity. As a coffee shop server in a diverse city containing a large university, Selma says:

> [I have provided customer service to people with] different attitudes, ethnicities and just, I mean it's, I've learned people tell me stories all the time when they're waiting in lines. Like I've learned a lot about that and just it's kind of exposed me to the idea of like the different types of people that there are and like who I'm going to interact with.

Selma also may use her workplace to develop the strategy of bridging divides in culture. She recalls one woman at her job:

> She was trying to explain, so like there's some words in Arabic that like there's no like direct translation for an English—that word doesn't exist in the English language is what I'm trying to say—that there's nothing similar to it, but she was I think, I don't know what she said was wrong with her coffee. But the way she explained it, like I [as an Arabic speaker] was able to understand what was wrong with it because my mom has like talked about it before when she's like cooking and stuff. Like she used the word a lot, so like I was able to figure out how to solve the problem.

Here, Selma employs a part of her own culture to understand someone else's perspective and help communicate that perspective to her bosses.[45] Similarly, Selma tells another story in which she serves a non-English-speaking Chinese customer place an order through the translation app on the woman's phone. Selma recalls that the County program also develops her strategies for appreciating personal identity: "There were a lot of like clubs and communities at [the community college] and at [County] …and through those clubs and stuff I was really able to find like who [I was]."

Comparing the First Gens' Conception of Community Influences to the Framework

In this chapter, Mariama, Abdi, and Steven, the three first gens, discuss factors in their communities that they believe affect the development of their college ready behaviors and attitudes. They have more to say about their communities than Selma and Rubie, the two non-first gens. Within the interview segments that are focused on developmental influences, over a third of each first gen student's discussion focuses on community factors (about 35 percent on average; see Tables 5.1 and 5.2). The interview segments dealing with influences only turn to community factors less than half as often for the two non-first gens (about 15 percent on average). Moreover, Mariama, Abdi, and Steven also talk about community both promoting and inhibiting their development, which differs from the wholly positive view Selma in particular has of her community.

In Table 6.2, I coalesce what the first gens have to say about their community's influence on their development of college readiness, making sure to also include the non-first gens' similar and alternative perspectives. The table repeats from Chapter 2 (Table 2.3) the initial framework's list of community factors that scholars say affect the students' college experiences. Table 6.2 then catalogues the students' descriptions of each factor, revealing either (a) what they see and hear community members do and say or (b) the conditions, characteristics, or occurrences that stand out to them. The table also identifies the college ready capacities that the students say that each factor affects, and the table symbolizes whether the students say that a factor promotes (✔) or inhibits (✖) their development of those capacities.

[45] Selma's family taught her to communicate in Arabic. She recalled: "Yeah I just, I grew up with it. My parents spoke it when I was really little. I'm still learning how to like perfect my reading and writing, but my speech is really good now, I guess."

Table 6.2

Mapping onto the Framework the Students' Conception of Their Community Factors that Affect College Readiness

COMMUNITY FACTORS	IDENTIFIERS	REPORTED EFFECTS	SOURCES
Family (*via Aspirational Capital*)	• Parents and extended family instill the desire to earn an education for the purpose of bettering one's country of origin	✔ Set goals	Abdi
Family (*via Familial Capital*)	• Older siblings in college who model developing peer social networks to support them academically and socially; Parents who prompt reaching out to County personnel for help with conflict with college professor	✔ Self-advocate ✔ Ask peers for help	Mariama, Rubie
	• Parents prompting students to wake up earlier	✔ Attend	Abdi
	• Parents who model balancing multiple tasks and using spare time in between activities to complete them; Parents encouraging students to maximize the number of college course credits earned in County program	✔ Manage your time	Abdi, Selma
Students' Learned Languages (*via Linguistic Capital*)	• Student using language spoken at home to help a work supervisor communicate with a customer	✔ Appreciate personal identity	Selma
Community Networks (*via Social Capital*)	• Introduction to professionals and career options facilitated by family engaging those professionals' services (e.g., going to doctors)	✔ Set goals	Selma
Employment (*via Navigational Capital*)	• Students serving customers with "different attitudes [and] ethnicities"	✔ Appreciate personal identity	Selma
Employment (*via Human Capital*)	• Work and school demanding that students balance those two commitments	✔ Manage your time	Abdi
Students' Cultural / Social Origins (*via Resistant Capital*)	• Family instilling a desire in students to earn a degree in order to improve the economic self-determination and employment in their country of origin	✔ Set goals	Abdi
	• Travel with family to their country of origin; Faith community modeling the act of educating others about that faith	✔ Think critically ✔ Appreciate personal identity	Selma

KEY: The reported effects include times when community promotes (✔) or inhibits (✖) the students' development of the named practice.
NOTE: The non-first gens' names (and any data attributable *only* to non-first gens) appear in gray text.

I make three assertions when comparing the first gens' and the framework's conceptions of how community affects the development of college readiness. To start, I contend that the two conceptions are similar because:

- The first gens discuss four out of the seven community factors listed in the initial framework.

I also contend that how the first gens describe community's influence on them differs from or adds to the initial framework in two ways:

- The first gens concretely describe what happens, or what circumstances are present, when each community factor affects their development; and
- The first gens perceive that community either promotes or inhibits the development of ten out of the sixteen college ready capacities that they mention.

Below, I review the findings from the first gens' narratives that support each of these assertions.

Parallels between the Framework and the First Gens' Conception of Community

Assertion #1. *The first gens discuss four out of the seven community factors listed in the initial framework.*

One community factor that the first gens discuss is part-time employment. By mentioning this factor, they invoke a part of the initial framework, which is there because researchers find that it affects students' postsecondary performance (Nuñez & Sansone, 2016).

The next three factors are parts of the first gens' home lives. Two of these factors are the ways in which family members both (a) help the first gens to have dreams for the future and (b) provide various forms of encouragement and direction to the students as they go about achieving those dreams. A closely related factor encompasses the cultural and social identities that families pass on from their countries of origin. Not only do the first gens discuss these factors, but all three also appear in the initial framework because researchers find that they can have an impact on students' college success (Mobley & Brawner, 2019; Nuñez, 2005; O'Shea, 2016).

Finally, Mariama, Abdi, and Steven also talk about their family and identity factors in unexpected ways. They mention being the first person in their families who will earn a college degree, and they talk about the impacts that they perceive their first gen status has on their development of college readiness. Steven also talks about the ways in which he perceives that his racial and socioeconomic background and identities affect

his readiness. I lump these stories together because, as my other assertions will explain, the first gens believe all of these community factors (a) possess deficits, (b) inhibit their development of college readiness, and (c) contradict what County teaches the first gens about college readiness.

Selma, one of the non-first gens, talks about three community factors from the initial framework that Mariama, Abdi, and Steven do not discuss. She reports that her ability to speak a second language (Arabic), her community networks (e.g., with her family's physicians), and her interpersonal work experiences (e.g., serving diverse customers) all affect her development. In so doing, her story demonstrates that these community factors can be relevant to at least one of the County students in this study, as I anticipate in the framework based upon my read of the literature (Nuñez & Sansone, 2016; Yosso, 2005).

How the First Gens' Conception of Community Goes Beyond the Framework

Assertion #2. Mariama, Abdi, and Steven do more than simply mention that the preceding community factors influence them. *The first gens concretely describe what happens, or what circumstances are present, when each community factor affects their development*. Specifically, Mariama, Abdi, and Steven recall five types of details:

- the messages that each community factor sends (e.g., "my parents say that getting an education is valuable");
- the actions a factor models (e.g., "my sister in college asks her classmates for help");
- the characteristics a factor exudes (e.g., "my neighbors are closed-minded");
- the conditions a factor creates (e.g., "my job requires me to be on time"); or
- the experiences a factor enables (e.g., "my family brought me on a trip overseas").

These details make it clear how each community factor influences their development.

An objective of this chapter is to compare how the students describe the community influences on their list to how the initial framework depicts its list of factors. One way of doing so is to compare the details in the students' stories to the identifiers that I associate with each community factor in the framework (see Table 2.3). This task is easiest when I divide the first gens' descriptions into the same two categories that appear in the literature. In some of the first gens' descriptions, what a community factor does, or the circumstances surrounding that factor, are *forms of cultural capital*. (Selma, a non-first gen, also sees cultural capital in her community.) In other descriptions, the first gens portray the *deficits* that they associate with the community factors.

Cultural Capital in the First Gens' Communities. Sometimes, the first gens talk about community members sending messages or taking actions that are forms of cultural capital, as defined by Yosso (2005) and others. For instance, Abdi recalls that his family pushes him to gain an education in order to improve his own life and those of people in Somalia, his country of origin. Abdi's family's encouragement is aspirational capital (Nuñez, 2005; O'Shea, 2016) because what his family says feeds his desire to earn a college degree. In two other instances, Mariama's older sister models behaviors that benefit her sister as a college student, and Abdi's mother models multitasking as she manages the family household. Modeling effective behaviors is a form of familial capital according to extant research (Gist-Mackey et al., 2018; Mwangi, 2015; Nuñez & Sansone, 2016). Collectively, Abdi and Mariama observe their families saying and doing things that match with the identifiers of aspirational and familial capital that I include in the framework.

At other times, the messages or conditions that exist in the first gens' communities are examples of cultural capital, but what the first gens experience differs from what those same forms of cultural capital look like in the framework. For instance, Abdi learns from his family that there is a need to improve the economic self-determination and employment in his country of origin. This message is an example of resistant capital, in that it prompts Abdi to use his education to "challenge inequalities" (Yosso, 2005, p. 80). O'Shea (2016) also talks to students who draw on resistant capital in order to encourage themselves to attend college, but those students specifically resist being underestimated as college students because they are women or are raising kids while in college. In another instance, Abdi reports that, in order to hold a job, he must be on time and balance his job with other responsibilities. Having to meet these conditions of employment is an example of human capital. In Nuñez & Sansone's (2016) study of the effects of employment on students, they find that a job teaches technical knowledge and skills central to a profession, which is a different type of human capital. These two ways in which Abdi says that his family and job affect him exemplify resistant and human capital differently than I do in the framework.

Cultural Capital in the Non-First Gens' Communities. When discussing Assertion #1 above, I note that Selma, a non-first gen, talks about influential community factors that Mariama, Abdi, and Steven do not (i.e., languages, community networks, and interpersonal interactions at

work). Similar to the first gens however, she does describe what happens, or what circumstances are present, when each of these three community factors affect her development.

Selma describes three forms of cultural capital in her community that influence her. First, she mentions that her family teaches her Arabic, a type of linguistic capital that she employs while traveling and at her job. This description is an addition to the framework, which does not contain reference to linguistic capital in known research. At that job, Selma also learns how to successfully interact with others, which is navigational capital that she says she applies at in her college classes. This is consistent with the conception in the framework that employment can instill navigational capital that helps students to deal with college peers, staff, and faculty (O'Shea, 2016). Finally, Selma talks about networking with medical doctors that her family introduces to her, which has an impact on her decision to pursue medical school. That example of social capital differs from the conception of that idea in the framework. There, the framework incorporates scholarship that conceives of social capital as something that exists as networks (a) outside of a students' immediate families (Mwangi, 2015), (b) among counselors, tutors, and other support personnel at college itself (Nuñez, 2005), or (c) among student peers (Mobley & Brawner, 2019).

Perceived Deficits in the First Gens' Communities. Mariama, Abdi, and Steven do not always believe that their communities use cultural capital to influence them. Rather, they identify ways in which, in their observation, their communities underprepare them for college. In so doing, the first gens engage in what Yosso (2005) would call "deficit thinking" that blames their communities for their lack of "normative cultural knowledge and skills" (i.e., capacities) (p. 75).

Specifically, Mariama, Abdi, and Steven report that their parents say and do things, or exhibit certain characteristics, that the first gens think are not helpful to their development. The first gens believe that their parents say, do, and exhibit these unhelpful things because their parents do not have a college education. For example, the first gens say that their parents lack the knowledge and experience to help them understand the bureaucracy and logistics of college, which is a deficit that earlier work identifies particularly in the parents of low-income first gens (Engle et al., 2006). In addition, Steven indicates that his parents' perceived lack of open-mindedness and knowledge causes them to hold worldviews that differ from his own once he is in college classes, which creates a sense of separation between him and his family. That same

distance between first gen college students and their families is known to happen (London, 1989; Longwell-Grice et al., 2016), though those authors stop short of characterizing the parents of the first gens in those studies as closed-minded or ignorant, as Steven claims.

Steven also talks about the ways that he believes that his backgrounds and identities influence him. Steven lives in a predominantly black, low-income community, and he associates himself with these demographics. He then reports that, in his opinion, devaluing education, normalizing child rearing by young parents, and not trusting authority figures are norms in his community. And when he talks about these norms, he considers them to be deficits that negatively affect his development.

Assertion #3. The preceding details from the first gens' (and non-first gens') stories form pictures of what each community factor does to shape the students' development. The next natural step is to note what specific effects the community factors have, according to the students. *The first gens perceive that community either promotes or inhibits the development of ten out of the sixteen college ready capacities that they mention*.

Promoting the Development of College Readiness. The first gens predominantly talk about their communities promoting the development of noncognitive behaviors and attitudes. In order to build these capacities, I note specifically that the first gens learn from the cultural capital that each community factor offers, thereby offering one possible response to Nuñez's (2009) inquiry: how do students "convert" (p. 42) cultural capital into practice?

For instance, Abdi states that family and country of origin promote the development of one noncognitive practice through which he takes ownership of his learning: goal setting. As I discuss above, Abdi draws on aspirational and resistant capitals to develop these behaviors. Specifically, he puts his and his family members' desire to give back to their home country into action by deciding to pursue a business degree that will, in his mind, enable him to foster employment and self-determination in Somalia.

Mariama and Abdi attribute the development of a various noncognitive capacities to familial capital. To return to a prior example, Mariama states that, when her older sister talks to Mariama about her own successful habits as a college student, the sister models behaviors like self-advocacy and asking peers for help that Mariama says that she mimics in her own practice as a student. Instead of developing these same two capacities through which Mariama takes ownership of learning, Abdi instead indicates that he converts familial capital into learning

techniques. He recalls that his mother both models behaviors like time management, by efficiently running their household, and directly prompts him to rise early from bed in order to have on-time attendance practices.

Similar to the impact of his mother's familial capital, Abdi explains that he believes that his job builds his human capital in ways that then help him to develop time management capabilities. Specifically, being employed requires Abdi to balance, and thereby make time for, his work responsibilities alongside his schooling and home life.

In addition to what Mariama and Abdi report, Selma (a non-first gen) adds examples of community cultural capital helping her to develop college ready capacities. She tells one story in which she uses her linguistic capital at her job to relate to a customer and another story in which she recalls serving customers with "different attitudes [and] ethnicities": a type of navigational capital. Selma says these two forms of community cultural capital help her grow her capacity to appreciate personal identity, which is one of the behaviors through which the students exercise college knowledge. Selma also relates that the social capital she builds by networking with medical doctors helps her to set a goal of going to medical school. Goal setting is a noncognitive behavior on the students' list. Finally, Selma points to two models of resistant capital, traveling to the disputed region of Palestine and watching her Islamic faith leaders educate non-Muslims about their religion, as precursors to developing capacities like appreciating personal identity (a college knowledge-related behavior) and critical thinking (an academic behavior).

Inhibiting the Development of College Readiness. Unlike Selma, the first gens talk about community inhibiting their development of certain noncognitive behaviors, college knowledge, and academic capacities. In these examples, Mariama, Abdi, and particularly Steven allude that the deficits that they perceive in their communities are what inhibit their development of specific college ready capacities.

Steven is especially critical of his community. Though he is mired in stereotypical thinking, Steven claims that the members of his predominantly black, low-income neighborhood devalue study skills, thereby inhibiting his development of organization and preparation capacities. He adds that his community members' distrust of authority figures like police offers models behaviors that counter his capacity to build social capital with authority figures like teachers.

In contrast, Rubie (a non-first gen) makes a more straightforward link between her family's limited resources and her development of college readiness. She shares that she finds it difficult to enact self-advocacy, time management, and attendance because her family's living circumstances limit her ability to transport herself to and from school at County. This is similar to how, in the literature, there are indications that certain impediments in students' at-home lives (e.g., proximity of home to school, a need to care for family members, a need to work) can logistically interfere with attending school and doing coursework (Mehta et al., 2011; Pike & Kuh, 2005; Saenz et al., 2007).

Beyond Steven's and Rubie's different individual perspectives of race and socioeconomics in their communities, all three first gens outline the deficiencies that they see their parents retain as a result of not having earned a college degree, and they blame those deficits for inhibiting a range of college ready capacities. For instance, Mariama and Abdi say that their parents have insufficient understanding of the workings of postsecondary environments to help them learn to navigate college systems and to take advantage of opportunities to self-advocate: a form of college knowledge and a noncognitive behavior, respectively. In another example, Steven perceives that he has trouble both being part of a learning culture (a college knowledge-related behavior) and making the attainment of a college degree a goal (a noncognitive behavior) because his parents send messages indicating that they do not see the value of getting an education as a step toward improving one's life. In yet another example, Steven characterizes his parents as closed-minded and uninformed, and he reports that these deficits counter his development of critical thinking and an appreciation of personal identity: an academic capacity and a type of college knowledge, respectively. As a possible result, and as scholars determine can happen under such conditions to first gens, Mariama, Adbi, and Steven express feelings of increased stress (Jenkins et al., 2013), tensions with family members (Gist-Mackey et al., 2018), misgivings that their families truly understand their role as college students (Whitehead & Wright, 2017), and a lot of self-doubt (Lanford, 2019).[46]

Exploring the Intersection of Context and Community

Within and across the preceding assertions, I note in part that the first gens' perceive that their parents exhibit shortcomings and that those shortcomings inhibit their development of

[46] The non-first gen students, Selma and Rubie, do not mention any ways in which their parents' having attended college or having earned a postsecondary credential gives them cultural capital or otherwise affects their development of college ready capacities.

college ready practices. When I contrast this finding with extant literature, it is somewhat surprising that Mariama and Steven, in particular, have an entirely negative perception of their parents and, in Steven's case, his community. In that earlier scholarship (Mobley & Brawner, 2019; Nuñez & Sansone, 2016), first gen participants instead describe experiencing *both* challenges related to their parents and cultural capital derived from parents. What is common across this literature is that the participants also say that they start noticing those challenges and forms of community capital when who they are at home begins to intersect with who they are becoming at college (Lowery-Hart & Pacheco, 2011; Nuñez, 2005; Vasquez-Salgado et al., 2015). Noting that scholars identify this intersection between community and context, and then re-approaching my data, I raise two questions:

- What is it about encountering the County context that prompts the first gens in my study to think about their community identities and cultures?
- In what ways do the first gens in my study concurrently make sense of their community culture and the County contextual culture; and, is one of those ways making sense of those cultures' respective norms of college readiness?

These can only be questions because my data limit how much I can speak to either. But, through the mix of scholarly and data analysis that follows, I explain how I arrive at these questions about the intersection between context and community.

Interactions Between Steven's Perceptions of County's Majority Student Population and His Perceptions of Community

The first question comes to mind after hearing Steven agonize over thinking of himself as one of few black, low-income students in what he sees as a predominantly white, high-income student population. Specifically, he says that his minority racial status contributed to him "internalizing racism" and developing an attitude of racial self-deprecation. He adds that, because he thought of himself as a low-income student in a high-income student population, he felt alienated, "judged," and "embarrassed." As a result, he states that these differences between his backgrounds and the County environment lead him to think of white, upper-class "culture" (and not his own) as "amazing and great." Steven's recollections here and elsewhere in his story lead me to observe that, in order for him to be able to fit in while enacting capacities like building social capital, creating peer learning networks, and generally acclimatizing to County's culture, he needs to resort to "lying about himself," as he says he was prone to do.

When Steven looks around at the identities he sees in his classmates (i.e., their race) and he assumes of his classmates (i.e., their familial income levels and non-first gen statuses), he seems to become more aware of identities he carries with him from his family and community. The ways in which he contrasts himself with his classmates extends to him noting (and eventually embracing) that they embody a different (i.e., white) convention of beauty. He further notes (and again internalizes) that certain identity groups are tied to who makes for an authoritative guiding figure, based on who teaches him at County (i.e., white male teachers). As Steven considers those around him at County and contrasts them with those with whom he has relationships at home, those contrasts bring his racial, socioeconomic, and first gen identities to the surface.

Much as they seem to do for Steven, Orbe (2014) finds that such contrasts tend to make first gens more aware of their status, especially when it interacts with other identities like race and class. Like some of the participants in Orbe's study, Steven's initial transition to County is what seems to trigger his heightened awareness of his identities, given that that is when he first comes into contact with others he assumes have different backgrounds than him. He feels, like one of Orbe's participants puts it, "out of place." Moreover, students of color and those from lower socioeconomic status in Orbe's study are more prone to say they are aware of their first gen identity. This mirrors how Steven also often talks about those same three identities in the same breath, naming them as conjoint inhibitors of his college readiness. And, also like many of Orbe's participants, Steven wants to hide his identities from classmates because those differences exacerbate feelings of embarrassment about being poorer or from a family he thinks does not value an education.

Looking at this part of Steven's story through the lens of Orbe's (2014) work, it is worth asking if the contrasts between what Steven identifies as the dominant cultural groups among County students and his own community backgrounds are what make his racial, socioeconomic, and first gen identities salient to him. A generic version of this question therefore could be: What is it about encountering an educational context that prompts first gens to think about their community identities and cultures?

Interactions Between Mariama's Perceptions of County's Teachings and Her Perceptions of Community

Steven's story prompts me to ask how the intersection between context and community might raise first gens' *awareness* of identity and culture. Mariama's story then prompts me to further ask what first gens do to *make sense* of identities and culture norms that surface at the intersection between context and community.

Mariama provides an example of sense making at the intersection of these two dimensions. In one semester, Mariama's County math teacher deems Mariama's soft skills unsatisfactory, which necessitates that Mariama repeat the course the next semester. From her perspective, Mariama recalls that the math teacher does so because she wants Mariama to improve her capacity to self-advocate, in particular. Mariama remembers understanding that she needed to improve by being less argumentative when she self-advocates. Specifically, she tells me that she accepts that she "had to learn to adjust" her communication style and "shut [her] mouth" if the teacher "says something to you that you don't like." Pulling from a separate story, I see that, by accepting these new norms of college ready behavior, Mariama may be foregoing her own familial capital. That is, Mariama shares that she learns her original, animated communication style from her sister. Mariama describes both her sister and herself as "loud and extraverted," and she says that she and her sister are prone to working through things by "fighting."

Here, Mariama's experience seem to embody what Carpenter and Peña (2017) refer to as cognitive dissonance, in this case between two cultural sources of meaning about what good communication looks like. That is, her familial capital engenders one set of norms for communicating, and her math teacher requires different norms. Carpenter and Peña study the process through which first gens undergo self-authorship, which they define as college students' use of their own internal persepctives to guide how they interact with the world (p. 87). The authors find that, for some of their participants, cognitive dissonance can push first gens toward self-authorship; though as with Mariama, the dissonance might come early in students' evolution. To elaborate, Carpenter and Peña's suggest that, like Mariama is doing, a first stage of self-authorship is deciding what ideas and truths to accept from external influences. That dissonance can act as a "triggering experience which prompts an individual to become unsatisfied with relying on external sources while striving for a more internally define self" (p.

91). Mariama recognizes the dissonance, in that she knows she needs to choose between two different cultural norms for how to communicate. However, it is not possible to tell from what she says whether she has moved on to self-authoring (i.e., internally values a less argumentative style) or if she is still aligning with external contextual norms (i.e., her teacher's) out of necessity.

Regardless of how close she is to self-authoring in Carpenter and Peña's (2017) sense, her anecdote affords enough reason to ask if reconciling cognitive dissonance represents one way by which Mariama tries make sense of her community (i.e., familial) culture and County's contextual culture, specifically their norms for self-advocating and communicating. A broader way of asking about what seems to be happening with Mariama is: In what ways do first gens concurrently make sense of their community culture and their educational context's culture; and, is one of those ways making sense of those cultures' respective norms of college readiness?

Conclusion

In this chapter, it is evident that all five students feel that community factors influence their development of college readiness. However, Mariama's, Abdi's, and Steven's stories differ from Selma's and Rubie's primarily because of the ways that the former say that their first gen status affects their development. That is, Selma and Rubie rarely say that any community factor inhibits their college readiness; but Mariama, Abdi, and Steven mention that their parents' lack of college experience, and the deficits the students associate with that shortcoming, negatively affect their development of college ready capacities.

Thus, in this chapter, the first gens explain how *community* can affect their development of their *capacities*. But, by revealing how identity awareness and cognitive (i.e., cultural) dissonance happen for them, Mariama and Steven also provide evidence that, alongside theory in the literature, allows me to raise other important questions. Namely, their narratives prompt me to ask about how *context* and *community* might interact and how those interactions might affect their conceptions of which *capacities* constitute college readiness and what it looks like to put those capacities into practice. In the next chapter, I further discuss these intersections, and others, that exist between the three dimensions of the framework.

Chapter 7 – Summary, Discussion, and Implications

Introduction

The problem that motivates this study is that first gen students on average are less likely than their peers to experience postsecondary success. This may be because first gens can enter college without skills and knowledge that match those that postsecondary institutions expect of college students.[47] There are potentially useful synergies across three bodies of scholarship that study and address such concerns about first gen college readiness, and yet leveraging these three literatures poses a set of challenges. One is that the literatures are as yet not integrated, with each understanding college readiness from a distinct perspective. That means that any researcher or educator seeking to use these literatures has to do a formidable amount of scholarship up front to leverage them. A second point is that carrying out that scholarship is not easy because these literatures not only do not speak the same language but also fail to consistently and clearly define their own respective terms and ideas. Each has their own, indefinite norms of discourse, terminology, and foundational concepts, which complicate seeing their synergies. Rather, in order to help researchers and educators understand and address first gen college readiness, there is a dual need to (a) integrate the three strands of scholarship into a coherent framework and (b) concretize the core concepts from the scholarship by visualizing what they can look like in real life.

In this study, I take three steps toward meeting this need. First, I present a framework in which I synthesize the scholarly perspectives. This framework consists of three dimensions, each drawn from a different strand of scholarship. Namely, those dimensions represent what scholars say are (a) capacities associated with college readiness as well as (b) contextual program design elements and (c) community factors that have the potential to affect students' development of those capacities. Second, I then examine all three dimensions of that framework through the lived experiences of three first gen students (alongside a duo of comparative non-

[47] Again, there is a perception in some literature that first gens, more so than non-first gens, are underprepared and thus lack, or less often mobilize, college ready skills & knowledge. That perception may exist because, according to other scholars, first gens can come to college with cultural capital that is not culturally normative, and thus is undervalued or seems contrary, in postsecondary environments.

first gen students). And third, I compare what I learn from the students' narratives with the scholarly conceptions of capacities, contextual elements, and community factors that I incorporate into the initial framework.

In this final chapter, I look back at those comparisons in order to further elaborate and extend both the framework and the research scholarship that the framework represents. Specifically, I suggest that I can use what the first gens tell me to (a) make the concepts in the framework and the scholarship easier-to-understand and (b) show how the distinct scholarly approaches in the framework can work together. In closing, I also talk about the limitations of this study as well as the implications that it and its framework have for thinking and reasoning about readying first gens for college.

Summary of Findings

The first gen students in the study, Mariama, Abdi, and Steven, tell the stories of how they came to develop college readiness while at County. The testimonies from the two non-first gen participants, Selma and Rubie, reinforce, supplement, and accentuate what we learn from Mariama, Abdi, and Steven. I report these findings across the preceding three chapters, each of which respectively captures the students' conceptions of the capacities, contextual elements, and community factors that they say factor into their experiences with developing college readiness. It is through these findings that I answer my three research questions. It is those answers that I then map onto the three dimensions of the initial framework.

The first research question asks:

> *What behaviors, attitudes, and strategies do students participating in the study (a) believe are important to put into practice in order to be ready for college and (b) cite as having made a difference in their college readiness?*

In response, the first gens mention all of the capacities that I synthesize into the framework from the literature, except those capacities related to accessing college (see Table 4.7). From the first gens' perspectives, college readiness consists primarily of noncognitive capacities and a smaller number of behaviors and attitudes related to college knowledge and academics. Mariama, Abdi, and Steven's noncognitive capacities include those through which they take ownership of their learning. For the students, this involves self-advocacy, building social capital, goal setting, follow through, knowing yourself as a student, and building self-reliance. The noncognitive capacities that they find important also include techniques that they think help them learn, such as time management, attendance, organizing & preparing, and asking peers for help. In relation

to college knowledge, the first gens state that they find it important to know how to navigate their college's systems while at the same time appreciating personal identity and being part of a learning culture. In relation to academics, they cite the importance of skills, like thinking critically and writing well, and knowing core content in subjects such as English, math, and science. By and large, the two non-first gens share this conception of college readiness.

For most of these capacities, the first gens name postsecondary outcomes that they perceive that each capacity contributes to. Abdi and Steven give a lot of credit to their noncognitive capacities for helping them succeed as community college students. By taking ownership of their learning (i.e., self-advocating, setting goals, following through, knowing themselves as students), they believe that they can be soft skill credentialed, earn better grades, stick with their college courses, and achieve a college degree. Using learning techniques like time management, attending, organizing / preparing, and asking peers for help, Abdi and Steven also reach the soft skills credential, complete their courses, and academically integrate at the community college. In addition, these two first gens say that their academic behaviors help them succeed. Steven credits thinking critically with socially integrating into the community college, and Abdi credits knowing core content and how to write well with earning better grades.

None of the first gens comment that their college knowledge benefits their achievement. However, that is not to say that these types of capacities are worthless to the students in this study. Selma (a non-first gen) thinks that her being able to navigate college systems and appreciate personal identity respectively help her to academically and socially integrate into the community college.

The second research question examines why the first gens believe that the preceding capacities are important by asking:

> *What elements of the program design in this study (i.e., County) do participant students indicate affect their development of their practices?*

The first gens stories indicate that, from their perspectives, County incorporates seven out of the twelve program design elements that I pull from the scholarship into the initial framework (see Table 5.4). Mariama, Abdi, and Steven state that County teachers, BASE advisors, and other personnel provide direct instruction related to capacities they use as college students. They note that the first years of the County program include assessments like in-class exams, standardized testing, and soft skill credentialing that County personnel use to gauge the first gens' readiness for college and prompt appropriate interventions, if needed. Mariama, Abdi, and Steven say that

dual enrolling in college community courses, the rigor and relevance of those courses, and being a part of a secondary-postsecondary partnership (i.e., part of a college campus) further affect them as students. Throughout the program, the first gens add that their relationships, particularly with County personnel, also are instrumental to their development as students.

Neither the first gens nor Selma or Rubie, the two non-first gens, discuss five of the contextual elements in the initial framework (see Table 5.4). These are student-centered programming, social-emotional learning, college advising, as well as academic supports and ongoing advising within the postsecondary level of the program.

The third research question also examines why the first gens believe that the capacities that they name are important, and that question asks:

> *What factors in participant students' communities do they indicate affect their development of their practices?*

In response, the first gens discuss four out of the seven community factors that I incorporate into the initial framework from the literature (see Table 6.2). Abdi's part-time job fosters human capital that he carries over to being at college. Mariama, Abdi, and Steven recall that family members, like parents, siblings, and extended relatives, send messages and model behaviors that constitute familial capital that influences their growth into college students. Family also transmits to Abdi, specifically, aspirational capital and resistant capital relayed from his country of origin that he says shape him as a college student.

Further, all three of these participants say that their parents having earned no more than a high school diploma (i.e., Mariama, Abdi, and Steven being first gens) makes their parents either unable to help them transition to college or ill-informed when commenting about education and college. Steven perceives that his race and familial income complicate his development. However, the reasons why the first gens have such conceptions of these community factors are not straightforward or evident. One interpretation of examples from Mariama's and Steven's stories suggests that, when making sense of college readiness in light of their roles as County students and members of their families / communities, Mariama and Steven may (a) become more aware of their first gen status (and other identities) and (b) undergo cognitive dissonance regarding the cultural norms they respectively learn from context and community. It is unclear why these sense making processes result in negative perceptions of community in particular. But, identity awareness and cultural dissonance may be ways in which context and community interact within the first gens' lives.

The first gens do not discuss three of the community factors that appear in the initial framework; but Selma, one of the non-first gens, does say that those factors influence her development (see Table 6.2). She talks about her Arabic skills fostering linguistic capital that she can use at her workplace. She says that, at that part-time job, learning to interact with customers from diverse backgrounds gives her navigational capital. And, she indicates that networking with her family's medical doctors is a form of social capital that she gains.[48]

Discussion

One way of interpreting these findings is that the first gens stories reflect, and thereby corroborate, the conceptions of capacities, context, and community that have been a keen focus of researchers and that are summarized in the framework. That is, they mention all of the capacities as synthesized in the first dimension of the framework, and they talk about the majority of the contextual elements and community factors that I pull from the literature into the second and third dimensions of the framework. In addition, the *non*-first gens (a) reinforce these conceptions by naming many of the same capacities, elements, and factors that the first gens discuss and (b) supplement the first gens' conceptions by discussing capacities and community factors that the first gens do not. In these ways, the students' narratives seem to substantiate the basic skeleton of the framework.

However, Mariama's, Abdi's, and Steven's stories also help to flesh out the three scholarly dimensions that I include in the framework. While dependent upon the evidence in the first gens' stories and thus subject to further research, what results from my study is a provisional iteration of the framework that includes the following:

- A *terminology of capacities* that articulates what first gen students' college readiness can look like in practice;
- A *schema of context* that maps program design elements that can influence first gen students' development of college ready capacities; and
- A *schema of community* that identifies factors in first gen students' out-of-school lives that can matter to their development of college ready capacities.

Each of these revisions of the framework has the potential to elaborate and extend the current literature in a number of ways.

[48] Rubie, the other non-first gen in this study, has far less to say than the other four participants about the influence her community has on her development of college readiness. The findings from her narrative reinforce some of the first gens' conceptions about how community affects their development, but Rubie does not supplement that conception to the extent that Selma does.

First, the first gens' narratives portray in concrete detail their capacities, the County context, and their communities. By explaining what it looks like for them to be and to become college ready, the first gens can help us to visualize the otherwise abstract concepts in the framework, as described by researchers.

Second, the first gens' stories contain examples in which they perceive that their capacities, the County context, and their communities intersect and affect one another. Their stories thereby exemplify how we can think about all three dimensions of college readiness simultaneously and cohesively rather than as separate veins of scholarship, as is currently the case. Briefly, that includes using the terminology of capacities as a common language for describing how the schema of context and schema of community separately can affect first gens' development of college readiness. It also includes conceptualizing, at least provisionally, how the schema of context and schema of community might interact as they simultaneously influence first gen readiness.

Third, the initial framework is an integrative device that pulls in research about college readiness that is often general and thus rarely specific to first gens, particularly within the literatures about capacities and context. In this study however, we hear how Mariama, Abdi, and Steven experience the three dimensions as first gen students, with a chance to further differentiate their experiences by comparing to Selma's and Rubie's experiences as non-first gens. Thereby, I can depict in the revised framework conceptions of what capacities, context, and community can look like *in the lives of first gens specifically*. That allows us to provisionally envision and think about college readiness and its development from the perspective of those types students, subject of course to further research that does the same.

In the next four sections, I recall how I use the findings from this study to add to and revise the terminology of capacities, schema of context, and schema of community in the framework. I also raise for the framework unforeseen questions about how the schema's of context and of community may interact. I highlight how each revision provides a concrete and cohesive understanding of first gen college readiness, and I explain how those new understandings can elaborate and extend the current literature.

Terminology of Capacities

Because the first gens describe their behaviors in detail, I am able to visualize the framework's terminology related to capacities. The resulting, case-specific version of the list of

capacities articulates what first gen college readiness can look like in practice, at least for the students in this study.

These visualized capacities can address two needs in the current literature. First, they take a step toward answering Karp and Bork's (2014) call for greater "specificity of terms and constructs" (p. 28) in how scholars describe college readiness. These authors call on the scholarship to provide students, researchers, and educators with precise, easily understood conceptions of what it looks like to be college ready. The results of this study answer this call, while also adding new behaviors and attitudes to those that scholars associate with college readiness. Those results contribute particularly to the conception of college readiness at community colleges, given that is the type of college the first gens experience in this study. Second, as I will explain later in this discussion, the capacities articulated in this study can standardize how we talk about the effects that both context and community have on college readiness. Such standard terms can reconcile the currently distinct languages that scholars use within the three literatures, thereby taking a step toward helping scholars and educators use all three in tandem.

Visualizing College Ready Capacities Through Concrete Detail. The first gens' narratives depict college readiness in ways not always evident in either the initial version of the framework or the scholarship that I synthesize into the framework. That is, the first gens identify tangible strategies through which they put their capacities into practice (Karp & Bork, 2014), which allow us to envision these terms more concretely than other sources (Byrd & MacDonald, 2005; Conley, 2011, 2014; Reid & Moore, 2008). For example, I succinctly paraphrase their description of "self-advocating," a noncognitive capacity, as "proactively and professionally making time to meet with school personnel to get help." This brief statement represents a much more detailed set of strategies through which the first gens say that they put self-advocating into practice. For them, those strategies include:

- Meet regularly with your BASE advisor, County teachers, and community college faculty
- Meet as needed with the County Dean or community college personnel
- Meet during office hours as well as before and after class
- Communicate professionally and prepare so as to respect others' time
- "Get ahead" of issues that affect your attendance or performance in school

Here, Mariama, Abdi, and Steven effectively share what they do, who they do it with, when and where they do it, and why. With such details, we can craft a concrete picture of how they

mobilize this capacity. Such terminology can bring standard precision to the alternately vague, overly complex, or inconsistent definitions of these terms in the current literature.

For *all* of the capacities that they list, Mariama's, Abdi's and Steven's stories contain concrete visuals of what those forms of college readiness look like in practice (see Tables 4.3 – 4.7). Through their descriptions, we gain a vivid conception of college readiness that is specific to first gens: a population that few other studies about college readiness focus on (Byrd & MacDonald, 2005; Pascarella et al., 2004; Reid & Moore, 2008; Stebleton & Soria, 2012). To start, Mariama, Abdi, and Steven say that college-going students need to take initiative in their own learning through capacities like self-advocating, setting and following through on goals, building self-reliance, and knowing one's self as a student. Respectively, they put those capacities into practice with strategies like scheduling their own meetings with teachers, setting and taking incremental steps and daily tasks to meet goals, or monitoring their school performance. The first gens also say that college is not just an individual effort, and they tout the importance of collaborative capacities like building social capital, asking peers for help, appreciating personal identity (including that of others), and being part of a learning culture with others. They respectively put these collaborative capacities into practice through specific strategies like getting to know school personnel, building a peer support network, engaging and exploring shared interests with others, and mirroring the maturity of older classmates. Lastly, the first gens name practical capacities that they say help them in college, such as managing one's time, attending, organizing & preparing, navigating college systems, as well as thinking critically, writing well, and knowing core content. Again, they use associated strategies to enact these practical behaviors, including: tracking a schedule; being physically and mentally present; coming to class with needed tools and materials; identifying, locating, and accessing college resources; being open minded to varying viewpoints; writing to their purpose and audience; and knowing the vocabulary of core subjects.[49]

Visualizing Additional College Ready Capacities. Moreover, the first gens talk about four more capacities than appear in the initial framework, thereby further adding to the conception of what college readiness can look like in practice. For instance, they say that seeking help, which appears as a single skill in the literature (Byrd & MacDonald, 2005; Nuñez

[49] Selma and Rubie, the two non-first gens participating in the study, also contribute to the lists of strategies associated with each capacity. Again, the strategies that they associate with each behavior or attitude overlap very closely with the strategies that Mariama, Abdi, and Steven connect to each capacity.

et al., 1998), includes both self-advocacy *and* building social capital. Something similar happens with three other skills from the literature: goal setting and focus (whereas the first gens discuss "setting goals" and "following through"), time management (whereas the first gens discuss "managing their time" and "attending"), and acclimatizing to postsecondary culture (whereas the first gens discuss "appreciating personal identity" and "being part of a learning culture").

Visualizing College Readiness at Community Colleges. I base the conception of college readiness in my initial framework primarily upon research that studies community colleges (e.g., Deil-Amen, 2011a, 2011b; Edmunds, Arshavsky, et al., 2017; Karp & Bork, 2014). In the ways noted just above, the first gens' stories then add to the conception of community college readiness, given that their early college lets them dual enroll in that type of institution. So, by helping us to more clearly visualize the capacities in the framework, the findings from this study reinforce and add to the picture of what community college readiness looks like in practice.

Schema of Context

As vividly as they describe their capacities, the first gens also concretely depict the ways in which the County context connects to their development of those capacities. By then comparing what the first gens say to the initial framework, the resulting list of County's program design elements is a revised schema of context. That schema maps what educational programs can do to influence first gens' development of college ready capacities, at least according to the County students in this study.

This schema of context has the potential to address two needs in the literature. The first is that scholars connect a number of educational program design elements to developing college readiness but infrequently lay out the steps that educators take when implementing such programmatic elements. The first gens' narratives, in contrast, make similar connections *and yet* also reveal what it can look like to implement an element by concretely explaining what they see County personnel do to affect their readiness. The second challenge is that the literature about educational programming and the literature about college readiness do not regularly overlap. That is because the former only studies how educational contexts affect college readiness abstractly or indirectly (i.e., by measuring how a context affects postsecondary outcomes or student engagement in the college environment but not how it affects specific capacities). My analysis of the first gens' stories, however, measures the effects of the County context in terms of

the specific college ready capacities that the students perceive that they develop. Those connections between County's contextual elements and the first gens' perceived development of capacities demonstrate that we can cohesively use two of the literatures underlying the framework in parallel. By delving into this synergy between literatures, I further determine that context not only can promote the development of college readiness but also can (a) inhibit it and (b) affect its evolution and devolution, as seen in the first gens' narratives.

Visualizing How County Affects Their Development. As an extension of what appears in the literature, Mariama, Abdi, and Steven provide detailed descriptions of the activities, conditions, or other mechanisms through which each element of County's program design affects their development. For instance, their "relationships" take a number of forms at County:

- Broadly, they perceive both that County personnel are approachable, supportive, trustworthy, and caring, and that County staff care about student well-being and success.
- They say that their BASE advisors are good listeners, encourage students to meet with and seek help from classroom teachers, help craft students' EDPs, and advocate that students use college courses to explore career options.
- They also recount that County teachers create enjoyable classroom environments and provide space for students to have a second chance.

As exemplified here, the first gens' narratives help us to concretely envision what it can look like for educators like those at County to implement relationships as part of an educational program, adding to the literature that describes what implementation looks like in practice (Barnett, Bucceri, et al., 2013; Geltner et al., 2014; Hamedani & Darling-Hammond, 2015; Karp et al., 2012).

Mariama, Abdi, and Steven similarly help us to visualize what they perceive it looks like for them to take part in *each* element from the framework that they say shape them as college students (see Table 5.4). The first gens' recollections allow me to note, for instance, that teacher checks on student planner and syllabi use, teachers providing soft skill feedback, or BASE advisors counseling students through personal and academic issues are manifestations of direct instruction, assessment / intervention, and relationships that the first gens experience. Similarly, the first gens having taken college courses geared toward career ambitions from professors who hold students to deadlines while accessing the community college's tutoring services are examples of dual enrollment, relevance, rigor, and the features of the program's secondary-postsecondary partnership.

Connecting Context to Particular College Ready Capacities. Beyond simply describing what happens at County, Mariama, Abdi, and Steven provide examples that directly connect the named elements of the County program to their particular, identifiable college ready capacities. Those direct connections stand in contrast to much of the scholarship I use to craft the initial framework. Scholars tend to talk about programs affecting either postsecondary outcomes or "college readiness" as an abstract concept; or when they do determine that a program affects college ready capacities, scholars define those capacities broadly or talk only about categories of capacities (Hooker & Brand, 2009; Struhl & Vargas, 2012; Warner et al., 2016). In contrast, the first gens' narratives instead illustrate ways to use the terminology of college ready capacities to discuss possible effects that contextual elements can have. This demonstrates how we can use these two dimensions of the framework cohesively.

Overall, Mariama, Abdi, and Steven perceive that the elements of County's program affect the development of all but five of their college ready capacities (i.e., know yourself as a student, build self-reliance, ask peers for help, be part of a learning culture, and write well). For instance, the first gens mention that exposure to college coursework that is relevant to their aspirations and, especially, relationships with County personnel often promote their development of many of the capacities through which they take ownership of their learning (i.e., self-advocacy, building social capital, setting goals, and follow through). They add that direct instruction, assessment / intervention, and relationships promotes their development of time management, self-advocacy, and building social capital. And, the first gens connect dual enrollment, relevance, rigor, and the program's secondary-postsecondary partnership with promoting the development of goal setting, time management, and the capacity to navigate college systems.

Connecting Context to Capacities in Unforeseen Ways. Yet, the first gens also explain that some of these same contextual elements can do more than simply promote college readiness development. Rather, they describe instances in which they believe that the County program also (a) inhibits their development and (b) causes their use of some their capacities to evolve and devolve over the course of the program. As examples of the former, the first gens indicate that the soft skill curriculum may not directly teach organization and preparation strategies, or they recall that the program's (perceived) norm that students 'should' get into college classes as early as possible may "rush" their development of goal setting. In regards to

their capacities evolving, some of the first gens feel that, once they are in their community college classes, exposure to older and more diverse community college students help them get even better at appreciating personal identity than they learned to do by interacting with County classmates. However in regards to capacities devolving, one first gen also reports feeling intimidated in large college classrooms with unsupportive professors, thereby leading to him wanting to participate less (as an attendance strategy) than he had while in County classes.

In these examples, what we see in Mariama, Abdi, and Steven's narratives suggests that the effect of context on college readiness development is not limited to promoting development and neither is it static, as I assume in the initial framework. Interestingly, it is *only* the first gens, and not Selma and Rubie (the non-first gens), who claim that County inhibits their development or causes their capacities to devolve. Onto itself, this may be an important distinction between these two types of students that is worth exploring in future research. It also highlights an instance in which examining how context affects the development of first gens specifically, which few other studies do (Reid & Moore, 2008; Reome, 2012), potentially expands the literature's broader understanding of how context relates to college readiness.

Schema of Community

Based upon the initial framework, I ask the first gens to talk about not only the County context but also their communities as potential influences on their growth. Mariama, Abdi, and Steven concretely describe the factors in their communities that they say connect to their development of their college ready capacities. By then comparing their descriptions with the initial framework, I offer a case-specific version of the framework's schema of community. That schema identifies factors in first gen students' out-of-school lives that can matter to their development of college readiness, at least according to the students in this study.

This schema of community can aid the scholarship about college readiness in two ways. First, Mariama, Abdi, and Steven help us to envision, in tangible detail, what they perceive is taking place when factors in their community affect them. Namely, they identify the cultural capital that they deem influential. By doing so for all the community factors in the framework, their narratives add to the literature, which has begun to depict or explain what mechanisms enable or cause some community factors to affect college students. Second, the first gens talk about the influence that they perceive that their communities have in terms of affecting the development of specific college ready capacities. This part of my analysis synthesizes the

terminology of capacities from one body of scholarship with the language of community cultural capital espoused in other literature, exemplifying how the latter can bear upon the former.

Visualizing How Community Affects Their Development. The first gens concretely describe what happens, or what circumstances are present, when each community factor affects their development (see Table 6.2). In this way, they make it evident why each factor can matter. Like the initial framework and the literature on which it is built, they portray times when community factors pass on cultural capital (Yosso, 2005)

For instance, Abdi's and Mariama's families encourage pursuing an education, and they say that that encouragement comes in various forms of aspirational, familial, and resistant capital. Specifically, Abdi's mother and uncles instill in him a desire to earn a bachelor's degree in order to improve the economic self-determination and employment in his country of origin, Somalia. The first gens also talk about the ways in which community members model behaviors, as when Abdi's mom balances her household duties or Mariama's sister seeks out peer support while at college. These are, from their perspective, types of familial capital. In addition, the first gens discuss the formative experiences and opportunities that community institutions afford. For example, Abdi talks about his job making demands on his time that he must learn to meet, which are forms of human capital that he gains.

In all these ways, the first gens' stories help us to see what they perceive is going on when community affects their development. That is, they talk about what it looks like when community passes on cultural capital. They mention messages that community members send, actions that community members model, characteristics that community members exude, or conditions or experiences that exist in their communities. Doing so adds to the literature's conception of what happens, or what circumstances are present, when a community factor affects first gens. To a degree, the examples from the first gens reinforce those in the literature that identify family in particular as a source of aspirational and familial capital (Gist-Mackey et al., 2018; Nuñez, 2005; Nuñez & Sansone, 2016; O'Shea, 2016). And yet the anecdotes in the first gens' narrative also serve, in ways not currently depicted in the literature, as novel examples of family and employment passing on resistant and human capital.

Connecting Community to Particular College Ready Capacities. The first gens not only concretely describe the forms of capital and deficits that they think that their communities

exhibit, but they also connect what they perceive that community does to their development of particular college ready capacities.

In some instances, the connections the first gens make in this study add to the examples in the literature in which students convert forms of community cultural capital into college ready behaviors and attitudes (Duncheon, 2018; Mobley & Brawner, 2019; Yamamura et al., 2010). For instance, Mariama and Abdi mention forms of familial capital (i.e., effective behaviors that family members model) that develop their capacities to self-advocate, ask peers for help, manage time, or attend. Abdi adds that he converts human capital that he gains by working (i.e., balancing a job, school, and home life) into time management strategies. And, Abdi says that his family passes on aspirational and resistant capital (i.e., a desire to give back to his home country) that help him set goals, such as when he chooses college courses or his career based upon his commitment to equity.

In other instances, the connections in Mariama, Abdi, and Steven's stories illustrate how they perceive that they inherit deficits from their community that inhibit their specific capacities. Specifically, all of the first gens say that their parents' lack of college knowledge, devaluing of getting an education, and closed-mindedness pass on deficits in the students' capacities to navigate college systems, be part of a learning culture, think critically, or appreciate personal identity. In addition, Steven perceives that the way his community members devalue studying inhibits his capacity to organize and prepare, and he thinks that his community members' distrust of authority figures inhibits his capacity to build social capital. On the surface, these findings appear additive because much of the scholarship examines what is happening in first gens' lives that may (negatively) affect their *measures of postsecondary success* (Chen & Carroll, 2005; Choy, 2001; Inman & Mayes, 1999; Pike & Kuh, 2005; Saenz et al., 2007; Warburton et al., 2001) or their *general well-being and stress* (Hoff Macan et al., 1990; London, 1989; Longwell-Grice et al., 2016; Mehta et al., 2011; C.-C. D. Wang & Castaneda-Sound, 2008). Instead, my analysis identifies more examples of first gen status as community a factor specifically affecting the development of *college ready behaviors* (Engle et al., 2006; Pascarella et al., 2004; Pascarella et al., 2003; Reid & Moore, 2008; Stebleton & Soria, 2012). As I will discuss momentarily however, my analysis also calls into question how much these 'deficits' and their negative effects on college readiness are real or perceived.

Regardless, the first gens' narratives illustrate that the terminology of college ready capacities can be useful for thinking about the effects that community can have. By looking at how the latter influences the former for the first gens in this study, we can begin to synthesize the literature that studies college ready capacities with the literature that studies community's influence on first gens' college experiences.

Provisional Interactions Between the Schemas of Context and of Community

In addition to context and community separately affecting the first gens' development of college readiness, Mariama's and Steven's narratives also contain a few instances in which these influences interact. Borrowing ideas from (Orbe, 2004), I ask if Steven's simultaneous connections to context and community seem to make him more aware of his identities as a first gen, as a black male, and as someone from a low-income neighborhood. Applying ideas from (Carpenter & Peña, 2017), I wonder if Mariama experiences a cultural dissonance in which she has to interpret differing norms of college ready behavior that she separately learns from County and her family. Pending future research, both of these lines of questioning may be important to studying college readiness development in first gens.

Based on Steven's story, I ask: What is it about encountering the County context that prompts the first gens in my study to think about their community identities and cultures? Examining identity awareness may be one way of answering this question. This construct can be defined as a state of being in which first gens' associations with social and cultural groups become more "salient" to them (Orbe, 2004). It may be useful to my framework and the literature because it reminds us that first gens' awareness of their identities may shift as they transition from their home communities into contact with different people and cultures in new educational contexts, like college. And, that shift could have an impact on their student practices, performance, and experiences at college. In Steven's case, his entry into County highlights to him that he is from a low-income family, and he changes how he presents himself as he enacts capacities like building social capital and creating peer learning networks.

When considering Mariama's narrative, I ask: In what ways do the first gens in my study concurrently make sense of their community culture and the County contextual culture; and, is one of those ways making sense of those cultures' respective norms of college readiness? One construct that could be useful to answering these questions may be cultural dissonance, which arises when an individual must make sense of two discordant cultural norms or practices. This

concept may be useful to my framework and the literature because it raises the possibility that there may or may not be alignment between what colleges expect 'ready' first gen students to do and what those students have learned at home. A lack of such alignment can make first gen students choose which norms to follow, potentially supplanting and devaluing their community cultural capital if they choose to adhere to dominant collegiate norms (Castro, 2013; Majors, 2019; Stephens, Fryberg, et al., 2012). Or, that lack of alignment can reinforce what norms are most important to the individual student, including reinforcing those they derive from community cultural capital (Carpenter & Peña, 2017).

In the two examples that Mariama and Steven provide, the interactions between first gens' educational contextual cultures and community cultures spark questions about identity awareness and cultural dissonance. How both constructs play out for first gens may be important to examine because both could bear on first gens' conceptions of which capacities constitute college readiness and what it looks like to put those capacities into practice. Given the limited evidence I have with which to demonstrate and explicate these two concepts, their inclusion in the framework is dependent upon future research to validate them both. Shortly, I suggest what that research could entail.

Limitations

The preceding analysis argues that Mariama, Abdi, and Steven's experiences with developing college readiness at County help us to concretely visualize and cohesively synthesize the three dimensions that I use to conceptualize college readiness in the framework. However, there are a few aspects of this study that limit my ability to substantiate those revisions to the framework.

To start, this study involves only three first gen informants, alongside only two comparative non-first gens. While all five provide in-depth accounts of their experiences with the three dimensions that I study, it is not possible to know if their conceptions are representative of other first gens and non-first gens at County and in the same out-of-school communities. The fact that the exact number of first gens at County is unknown further inhibits any attempt to gauge how representative the participants are of the broader population of County first gens.

In addition, despite efforts to triangulate the participating students' accounts using interviews with their BASE advisors, two types of data that would bolster the findings are missing from the study. First, I do not gather independent measures of the students' secondary

and postsecondary outcomes (e.g., course grades, attendance records, transcripts). Instead, I rely only on the students' perceptions that their behaviors, attitudes, and strategies translate into success at the community college. Second, I make no direct observation of the participants' practice as students in classroom and college environments. I therefore cannot corroborate (a) that they actually put into practice the capacities that they say are important to college readiness and (b) that their perceptions of the County program are representative of the core work and infrastructure that exist at the school.

There are further limits to situating the study at a single site. Studying County on its own obviously only provides the chance to see what the program design elements from the framework look like in one context. Moreover, the conception of college readiness in the framework is site dependent. As noted earlier, this fact is evident when the program puts a lot emphasis on developing soft (i.e., noncognitive) skills and, unsurprisingly, the first gens spend a lot of time emphasizing the importance of such skills to college readiness. It is also evident because the study's ultimate conception of college readiness is built upon both literature primary situated in community colleges and the observations of first gens attending a community college (as part of County's program).

It is clear that, in talking to Mariama, Abdi, and Steven, there are limits on how much we can learn about community based upon only their observations. That is because Mariama, Abdi, and Steven may not have an easy time isolating the effect that any one community factor has on developing college readiness. As scholars document with other first gens (Coffman, 2011; Orbe, 2004), Mariama, Abdi, and Steven do not make sense of their first gen status in a vacuum but rather alongside their other identities in the community. That is, the three first gens talk fluidly about the influence on college readiness that their families, race, familial incomes, countries of origin, *and* parents' education levels all have. One quote from Steven best exemplifies how community influences conflate in his mind:

> I'm African-American and… when you live in a low-income society, or when you're coming from a background where your parents didn't go to college, or things like that, it's not to say that they don't necessarily care about your education. But them caring and them pushing you goes as far as them dropping you off at the school doors.

Here, Steven indicates that how family (broadly), familial education levels (specifically), race, and income affect his development of the capacity to be part of a learning community all happens concurrently, not in isolation.

Finally, when crafting earlier versions of my conceptual framework, my use of the literature that discusses community cultural capital was limited compared to how I use it in the current iteration of this study. Initially, that scholarship simply provided a language for discussing what it is (i.e., forms of capital) that family and community can pass on to first gens, which they then can translate into college ready capacities. Now, my application of that literature also makes it clear that important questions remain about how the first gens make sense of their community cultural capital as they encounter County's culture. While I am able to draw on the scholarship and my findings to draft these questions (Carpenter & Peña, 2017; Castro, 2013; Majors, 2019; Orbe, 2004; Stephens, Fryberg, et al., 2012; Yosso, 2005), in retrospect my study would have benefited from directly asking those questions. And if answering those questions did show that the interaction between context and community affects how first gens conceptualize college readiness, possible additional questions I could have asked of my student and faculty participants include: What assumptions do County personnel make about the capacities that first gens need? As a result, what is County doing to 'ready' students that in fact may: (a) exacerbate tensions between first gens and their communities; and/or (b) erode first gens' abilities to recognize and engage cultural capital that they derive from their communities? And conversely, what is County doing to adjust its praxis and culture to make use of students' community-based cultures?

Implications

Given the limits on any one study to tease apart such a complex phenomenon, it is clear that there is more we can learn about first gen college readiness. That learning can be guided by two outcomes of this dissertation. One essential goal for, and outcome of, this dissertation is to put three independent lines of scholarship on college readiness into closer dialogue. And I argue that I have made progress towards synthesizing and conceptually clarifying these lines of scholarship in practicable ways. A key and unanticipated outcome of this dissertation is that my data draw me into putting these three lines of scholarship into deep dialogue with critical scholarship concerned with first gen students' experiences in college. These two outcomes have me uniquely positioned to consider possibilities for further research on college readiness (especially for first gens) in ways that extend existing trajectories and respond to critical perspectives. The latter response especially injects into the scholarly conversation talk of colleges being more first gen 'student ready.' I am also uniquely positioned to consider what

new insights from conventional and critical scholarship could mean to the work of postsecondary institutions in supporting first gen students.

Implications for Future Research

This study's implications for future research fall into two areas. As I set out to do, I combine and conceptually clarify three prevailing scholarly approaches to studying college readiness. Future research can take up and run with these approaches. Namely, I demonstrate that we can specify what college ready capacities concretely look like while also finding links to contextual elements and community factors that can develop those capacities. In addition to those approaches themselves being helpful, the specific terminology of capacities and particular schemas of context and of community that I generate by applying those approaches also can give researchers a sampling of concepts to initially explore.

And yet, my application of critical literature suggests that the conversation around college readiness does not and cannot end there. That literature helps me to realize that the three prevailing scholarly approaches underlying my initial framework presume that it is students, especially first gen students, who must be readied for college. Future research should question this presumption and instead identify the ways in which colleges can become 'student ready.'

In the next two sections, I respectively outline what researchers can do to both extend the three prevailing scholarly approaches to studying college readiness and then critically go beyond those approaches.

Extending Prevailing Approaches to Studying College Readiness. I suggest that future research can use the framework that I offer, and the literature on which it is built, to answer three questions:

- What forms of college readiness truly make a difference for first gens' success, and how do we develop such readiness?
- What readies first gens to acclimate to college campuses?
- What readies first gens to navigate the practicalities of getting to college?

Each of these questions prompts researchers to study how we can ready first gen students for college.

Fundamentally, the core approaches I put to work in this dissertation can be used to ask: *What forms of college readiness truly make a difference for first gens' success, and how do we develop such readiness*? To start, this could involve linking what first gens do as students to what they achieve as a result. I do so in this study by asking the first gens to self-report

examples when their capacities seem to lead to postsecondary success. Future studies might look for correlations between the presence of certain capacities and data about student GPA, persistence, or degree completion (Harackiewicz et al., 2002; Hoff Macan et al., 1990; Kitsantas et al., 2008; Nonis & Hudson, 2010; Pascarella et al., 2004).

In order to concretely describe what first gens do to achieve these results, scholars may also want to continue specifying, reinforcing, and refining extant constructs of college readiness, as called for in Karp and Bork's (2014) work. Given the evidence of their positive impacts in both the literature (Table 2.1) and this study (Table 4.7), the terminology of capacities from this study could act as provisional, evolving concepts against which to compare to new data about college ready capacities. That data could include looking further at (a) the ways that students put their capacities into practice (Byrd & MacDonald, 2005; Karp & Bork, 2014), (b) the expectations that educational institutions set around what it means to be college ready (Collier & Morgan, 2008), and (c) the lessons and norms of behavior that community and family pass on to first gen students (Nuñez, 2005, 2009).

Armed with a clearer picture of what college readiness looks like in practice, future research could then continue describing ways to develop such capacities. As I do and as suggested in extant scholarship, future research can continue using the approach of explaining what design elements of educational program designs can ready first gen students to put specific college ready capacities into practice. Early College Designs (ECDs), by incorporating some of the contextual elements identified in this study (Table 5.4), may offer fertile ground for conducting such research (Barnett, Fay, Trimble, et al., 2013; Barnett et al., 2015; Wechsler, 2001; Wolk, 2005). As I also do and as seen in other research that I review, future research can continue exploring if and how cultural capital acts as a bridge between first gens' communities and their development of particular college ready capacities (Nuñez, 2005, 2009; O'Shea, 2016; Yamamura et al., 2010). By exploring how this happens for the first gens in this study, I provide some initial forms of capital, and the possible community sources of such capital, that researchers may wish to examine (Table 6.2).[50]

[50] A trickier challenge for future researchers is how to disentangle the respective influence of varying community factors, particularly when the first gens themselves have trouble teasing them apart. As we see in this study and others, it is not clear when first gen status alone affects college readiness and when other community factors (especially students' racial and socioeconomic identities) intensify or moderate those effects (Carpenter & Peña, 2017; Engle & Tinto, 2008; Orbe, 2004). Models that control for other variables in the community may permit us to parse out how first gen status influences development of college ready capacities (Pike & Kuh, 2005).

Utilizing these approaches, future research can specifically look at how we can ready first gens to handle one particular challenge that participants in this study face. Namely, Mariama's and Steven's stories—coupled with my read of the literature (Lowery-Hart & Pacheco, 2011; Nuñez & Sansone, 2016; Vasquez-Salgado et al., 2015; T. R. Wang, 2014)—raise important questions about what they do to make sense of their personal, community-based cultures as they come into contact with County's contextual culture. Extant scholarly approaches, which focus on helping students to adapt themselves to college, might call for studying this challenge by asking: *What readies first gens to acclimate to college campuses*?

The scholarship and my framework envision some capacities that first gens could use to handle issues of culture at college. These capacities include being part of a learning culture (i.e., fostering learning and self-improvement as norms for one's self and others) and appreciating personal identity (i.e., engaging and exploring one's identity and the identities of a wide range of others).

Mariama's and Steven's experiences suggest to me that readiness for making sense of culture once at college may also involve more than these capacities. Based on Mariama's case, future research will want to learn more about cultural dissonance and how first gens can manage it. That is: What happens to first gens who experience cultural dissonance around (a) what it means to be college ready and (b) how it 'should' look when they put the related capacities into practice? Do they run up against dominant cultural hegemony that supplants and devalues their community cultural capital; Do they fall back on their community cultural capital; or, Is it something in between or altogether different? Based on Steven's case, researcher might further ask: Is cultural dissonance triggered by, or concomitant to, first gens having a heightened awareness of their community-based identities as they come into contact with new collegiate cultures? What distinct effects does identity awareness have on first gens' conception and practice of college readiness? And based on both cases, we might ask: How do first gen students and colleges navigate these two phenomena (i.e., cultural dissonance and identity awareness)?

One final extension of the prevailing scholarly approaches that I embed in my framework is for future research to determine how first gen students can be ready to access college, particularly four-year colleges. Mariama, Abdi, and Steven all express a desire to move onto baccalaureate-granting institutions, yet they do not talk about any capacities they can use to make that move. Future researchers may wish to ask: *What readies first gens to navigate the*

practicalities of getting to college? Based on my conversations with Selma (one of the non-first gens), I incorporate into the framework two related capacities that may warrant further study: knowing how to navigate the steps toward admission (Plank & Jordan, 2011) and understanding financial aid and college costs (Somers et al., 2004).

Responding to Critical Perspectives When Studying College Readiness. Each of the three lines of inquiry above is a variation on the same theme: what do first gen students need to be able to do to be *college ready*, and then what do educators do to help get them ready. However, when reflecting on my findings through the critical literature, I am pushed to question the presumption that it is first gens who must change in order to achieve readiness. Rather, I argue that there is also a need to find ways for colleges to be *student ready*: particularly, first gen student ready. Unpacking what it looks like for colleges to be first gen student ready can involve asking:

- How does culture within educational programs shape what it means to be college ready, and how do the resulting conceptions of college readiness interact with first gens' cultures and identities?
- How can colleges ready themselves to create environments in which first gens feel as if they belong at college just as they are?
- Which of first gen students' practical needs can colleges ameliorate?

By focusing on collegiate readiness for first gen students, each of these questions respectively reframes the preceding three lines of inquiry, which place greater emphasis on readying students.

Prevailing scholarly approaches, by conceptualizing college readiness as a set of student capacities to be developed in educational contexts and in students' communities, look for ways to change students. However, by foregrounding the role of community cultural capital in first gens' postsecondary experiences (Nuñez, 2005, 2009; O'Shea, 2016; Yamamura et al., 2010), and by raising important questions about Mariama's and Steven's efforts to make sense of that capital in light of County's culture, I suggest that conceptions of college readiness may be culturally relative. To the extent that this is true, there is a need to drill down deeper on two questions: *How does culture within educational programs shape what it means to be college ready, and how do the resulting conceptions of college readiness interact with first gens' cultures and identities*?

Future research can address these questions first by figuring out whose culture determines both (a) which capacities constitute college readiness and (b) what each capacity is 'supposed to' look like when first gens put it into practice. Both the literature and my study prompt this line of

inquiry. My read of Majors (2019) suggests that conceptions of college readiness can infuse educational institutions' dominant cultural norms. Then, in Mariama's case, County's soft skill credential calls upon her to self-advocate, and her math teacher defines what it looks like to mobilize appropriate, college ready self-advocacy. These standards contrast with her family's norms around communicating, and in the end Mariama choses to self-advocate in the manner desired by her math teacher rather in the manner she employs with her family. Extant literature rarely takes the time to empirically determine who does and does not get to define what readiness is, thereby missing opportunities to identify whose cultural norms can be included or excluded (Stephens, Fryberg, et al., 2012). Future scholarship could specifically look at an educational context's culturally normative standards of college readiness and determine how inclusive or exclusive they are of first gens' community cultural capital. Such research could also examine whether such interactions between context and community can send contrasting messages about what college readiness 'should' look like, as my analysis of Mariama's anecdote suggests.

Armed with a clearer sense of whose culture gets to drive standards of college readiness, future scholarship can identify in what ways culturally hegemonic conceptions of college readiness can perpetuate inequality between first gens and non-first gens. Namely, this line of inquiry involves asking: What systemic inequities do we perpetuate when we expect first gens (and other marginalized students) to emulate dominant norms absent the resources and preparation available to members of the dominant culture (Castro, 2013; Majors, 2019)? Further, which norms serve not as college ready capacities—that is, student behaviors and strategies with links to positive postsecondary outcomes—but rather as cultural hurdles that first gens must expend time and energy emulating, regardless of any actual benefit to them? And regardless of any such benefits, what harm is created simply by colleges asking first gens to supplant their cultural capital with alternative norms (Stephens, Townsend, et al., 2012)?

Using these lines of inquiry to figure out when colleges have standards of college readiness that are exclusionary of or harmful to first gens, future research can also seek out ways to correct for such conditions. Namely, scholars can ask: *How can colleges ready themselves to create environments in which first gens feel as if they belong at college just as they are*?

Answering this question means first determining what it looks like for first gens to feel as if they belong. For instance, Nuñez (2005) suggests that we might identify how first gens go about "maintaining and renegotiating ties with past communities" rather than "separating" from

them (p. 111; cf. London, 1989). Nuñez further suggests that we might identify how first gens go about becoming more connected, settled, and comfortable *as themselves* while at college rather than only or mostly taking on behaviors and norms consistent with their new collegiate culture.

Research guided by Nuñez's work need not limit itself to thinking about what it looks like for first gens to belong. We can also explore what educational contexts can do to foster such belonging. Welton and Martinez (2014), for instance, would have us think about what colleges and high schools can do to "capitalize" on the experiences and cultural capital first gens derive from community. These authors might also have us explore how educational contexts can "merge" first gens' cultural identities with their identity as college students. In addition to being useful for future research, Welton and Martinez's work prompts a number of implications for educators, which I explore momentarily.

In addition to attending to first gens' sense of belonging, a few of examples from my participants' narratives exemplify that there is also a need for research about the practical issues that first gens can face while attending college. Abdi talks about balancing his role as student with a need to help his mother manage their household and care for his younger siblings. Rubie (one of the non-first gens) mentions that issues around housing stability and traveling back and forth to County both affect her schooling. To me, these stories suggest that future research should ask: *Which of first gen students' practical needs can colleges ameliorate*? Answering this question piggybacks on existing work that examines practical and financial needs that first gens sometimes experience. These needs include balancing familial responsibilities (including parenting) with being a student, balancing employment and school, securing housing (and home environments conducive to studying) while in college, or securing transportation to and from school (Byrd & MacDonald, 2005; Engle et al., 2006; Glynn, 2017; O'Shea, 2016; Saenz et al., 2007; Stebleton & Soria, 2012; Vasquez-Salgado et al., 2015).

Implications for Educational Professionals

In the preceding scholarly agenda, I highlight the dual need for research that both extends the prevailing approaches used to study the development of first gens' college readiness and is responsive to critical approaches that I suggest we can use to study the student readiness of colleges. What above present as academic matters can also have implications for educators, who can apply both the prevailing and critical approaches to their work.

As I propose when outlining the former line of scholarship, educators can guide their thinking about first gen college readiness using the framework from this study. The dimensions of the framework can focus how educators think about their work: "What capacities constitute college readiness in our program?"; "What elements of our contextual design are we using to develop that readiness?"; and "What factors in our first gen students' communities might factor into their development?" The specific capacities, contextual elements, and community factors in my framework might then provide an initial, practicable vocabulary that can facilitate having the conversations inspired by those questions. In these ways the framework can act, not as a definitive set of concepts and theories, but rather as one possible model that educators can use to explore and map their own efforts to develop first gens' college readiness.

Because the framework is a provisional, evolving tool, educators would be wise to also think beyond the terminology and schema that I present. While an adequate map for how educators can understand first gens development of college readiness, there is still much work to be done around making colleges student ready. Paralleling the critical scholarly work that I propose above, some potential implications of this study for educators are:

- Question the presumption that first gens are the ones who must adapt to what educators assume college readiness looks like in practice;
- Get to know first gen students, leverage those students' community cultural capital to help them succeed, and assess their senses of belongingness; and
- Help first gens address their practical and financial concerns.

I elaborate on the first of these implications in the next section before taking up the latter two in the section that follows.

Reconsidering What College Readiness Means. As we see in this study, educators can shape conceptions of college readiness. The first gens point out how a number of the elements of County's contextual design influence which capacities they associate with being college ready (see Table 5.4). Given their affect on the standards of college readiness, educators may want to revisit what they think college readiness entails, including critically considering the assumptions that underlie that thinking.

On the surface, educators can use the terminology of capacities in this framework to prompt a dialogue in which they create or update their educational program's own set of capacities by which they measure college readiness (Annenberg Institute for School Reform et

al., 2014; Gurantz & Borsato, 2012). The advantage of the framework's list is that it contains associated strategies that make each capacity easier to discuss. It may be most useful for educators to not be bound by the framework's list, given the limitations of both this study and the existing literature. Rather, educators can use this study's terminology of capacities as a starting point for conversation. And, the detail with which I present the capacities I discuss can model how educators can flesh out concrete visions of what any given capacity looks like in practice (Karp, 2007; Karp & Bork, 2014).

However, educators who want to build programs that are student ready should heed cautions similar to those that I ask researchers to consider. Educators engaged in a process of setting standards of college readiness should *question the presumption that first gens are the ones who must adapt to what educators assume college readiness looks like in practice*. First gens may benefit from learning new capacities, but educators also can grow. First, they can identify what normative cultural assumptions they make about which student behaviors are 'right' and 'wrong' for college (Convertino & Graboski-Bauer, 2018; Welton & Williams, 2015). This process gives educators a chance to look beyond those assumptions and open up the conception of college readiness to include successful strategies that first gens derive from community cultural capital (Mobley & Brawner, 2019; Nuñez, 2005, 2009; O'Shea, 2016). Second, educators can stop presuming which capacities they think that first gens lack. In place of such presumptions, educators can instead identify and pointedly leverage (or address) what first gen students' observable strengths (or self-identified needs) are around college readiness (Castro, 2013).

Meeting First Gen Students Where They Are. Rethinking how they conceive of college readiness is one way for educators to meet first gens where they are, specifically by stepping away from what educators think college readiness looks like and toward what first gen students may need or already be able to do. This represents one among other steps that educators can take toward making their programs more student ready.

To the extent that this study's framework is representative of how first gens experience community as an influence on their college readiness, educators may need to give greater attention to first gens' sources of community cultural capital. The resulting framework suggests that factors like family, employment, and cultural / social identities can instill aspirational, familial, human, and resistance capital that can translate into college ready capacities. While

these examples are specific to this study, educators can explore tapping into similar sources of college readiness by acknowledging that first gens come to school with capital (O'Shea, 2016; Yosso, 2005). Educators can also help first gens recognize their own capital (Carpenter & Peña, 2017) and make it clear to first gens that the educators themselves recognize the students' capital (Baber, 2018). Students and educators can keep an eye out for capital developed by sources explored in this study, like family (Clemens, 2016), as well as that developed by sources not explored in this study, like peers (Alvarado & An, 2015; Marciano, 2017).

Educators concerned with being student ready can put the preceding into action by *building programs that can be more culturally responsive to students' assets that they draw from their communities* (Gay, 2018; Welton & Martinez, 2014). This likely starts with educators "truly knowing" their students' backgrounds, educational aspirations, and obstacles to success (Edgecombe, 2019). Being culturally responsive also likely means gauging and improving students' sense of belonging in their programs (Strayhorn, 2015). Cultural responsiveness can involve elements of a program functioning as "cultural brokers" that translate what students learn at home into forms of college readiness (Cooper, 2002). And finally, educators need to have sufficient training to permit them to take on these potentially new duties (Savitz-Romer, 2012).

Additionally, educators can craft student ready programs by *attending to first gens' practical needs*. As would probably help students like Abdi and Rubie, educators can create conditions to help first gen students balance their schooling with family or work responsibilities. Educators can also look for and mitigate potential barriers to learning like transportation or housing difficulties. And even if they are not issues that the participants in this study raise, educators can be student ready by helping first gens navigate the admissions and financial aid processes (Plank & Jordan, 2011; Somers et al., 2004).

Conclusion

Research that takes on the new lines of inquiry that I recommend earlier has the potential to further advance how we frame the study of first gen college readiness. With a clearly conceptualized and cohesively synthesized framework of college readiness, educators concerned with first generation students may then have an easier time channeling what the scholarship tells us into creating and improving educational programming meant to ready first gens to access and excel at postsecondary institutions. Such programming, I argue, also may involve secondary and postsecondary institutions being just as ready to meet students where they are at culturally and

practically. First gens who experience both individual *and* institutional readiness will hopefully more often succeed in securing a postsecondary degree that will set them on the path of a more prosperous life.

Appendices

Appendix A

Interview Protocol

Student Participants

Start of Interview #1

I would like to start by talking to you about what you think makes someone ready to be at a college and take college classes.

- Thinking back to before you took your first community college class:
  - What did you think those classes would be like?
  - What did you expect it was like to be a community college student?

- How can you tell when someone is successful at school?

Follow-up	**Clarifications**
What skills should a community college student have if [s/he] wants to be successful?	▪ What do you think are the habits of someone who does well in classes? (*NOTE: This is a prompt to talk about academic capabilities*) ▪ What do you think are the habits of someone who is good at taking ownership of their own learning? ▪ What do you think are the habits of someone who is good at helping themselves to learn? (*NOTE: These last two are prompts to talk about noncognitive capabilities*) ▪ What kind of attitudes do you think successful students have? (*Clarification*: That is, what do good students think or feel that helps them to be successful?)
What does a community college student have to know if [s/he] wants to be successful?	▪ What are the most helpful things to know before starting at a community college? ▪ What kinds of knowledge from high school will be most useful at a community college? (*NOTE: This is a prompt to talk about academic knowledge*) ▪ What should someone be ready to know about getting the help or the other stuff that you need while studying at a community college? ▪ What should someone know about the other people at a community college, and about being around those other people? (Like the teachers or the other students.) (*NOTE: These are prompts to talk about college knowledge*)

- What skills do the teachers and other people here at County think are important for you to learn? What knowledge do they want you to learn?

Approximate Start of Interview #2

Next, I would like to talk about what you may have done to get ready to be at a college and take college classes.

- Before taking your first community college class, what kind of opportunities did you have that may have helped you to get ready for college? (*Clarification*: An opportunity is a time when you learned knowledge or skills that might help you in college.)

Follow-up	**Clarifications**
Please give me an example of one of these opportunities.	▪ Did someone tell you or teach you something? What were they trying to teach you? What did they do to teach you? ▪ In what did you get to try any of the same situations that community college students face? Describe the experience in which you got to try out being a college student. ▪ Have you ever worked toward a specific goal? What did you do? How might that have helped you to get ready for college?
Where did these opportunities take place?	▪ (Like at school or work, or through another organization that you sometimes spend time with.)
Who helped you to have these opportunities?	
Were there any [other] opportunities at County that have helped you to get ready for college?	

- Think about the opportunities that we just talked about. As a result:
  - What skills, or habits, do you think that you now have that will help you to be ready for college?
  - What do you now know that will help you to be ready for college?

Follow-up	**Clarifications**
Do you think you have the capabilities we talked about earlier / last time?	▪ Which ones? ▪ (*NOTE: Remind them of prior answers that they gave about what makes someone ready for college*)
Which opportunities may have helped you learn those capabilities?	

- Before taking your first community college class, how did you know that you were ready for college?

Follow-up	**Clarifications**
How well did you typically do in your high school classes?	▪ How do you do in your academic classes, like English, math, science? ▪ Do you remember how you did on tests like the SAT or ACT, or the M-STEP tests, or any other tests you took that were supposed to tell you how ready you are for college [like the ACCUPLACER]? ▪ Have you taken, or will you take, any remediation courses before being able to take a college-level English or math course?
How did you do with your soft skill credentialing?[51]	▪ Do you keep track of what you need to do in order to graduate or meet other school-related goals [like those on your Educational Development Plan]? ▪ Do you attend school most days?
Have you accomplished something outside of school that told you that you might be ready for college?	▪ What might have helped you to have these accomplishments? ▪ Who may have helped you to have these accomplishments?

[51] NOTE: "Soft skills" equate to the study's examination of noncognitive skills. As a ubiquitous part of County's curricula and culture, the faculty, staff, and students at County utilize the term frequently. While each of those individuals may emphasize different skills and vary in how they define the skills, the PI understands that participants will know the term well enough to use it as part of the interview.

Approximate Start of Interview #3

Now that you are taking college classes, I would like to know how it is going.

- Please tell me about a challenge that you have faced and how you responded.

Follow-up	**Clarifications**
What challenges have there been?	(*NOTE: Probe for <u>anticipated</u> challenges if this and below questions do not elicit challenges experienced by the student.*) ▪ What about your college classes has been challenging? ▪ What is challenging about finding your way at a community college? ▪ In what ways has it been challenging to take ownership of your learning? And, to help yourself learn? ▪ In what ways has it been challenging to otherwise be successful? ▪ What challenges outside of school might be affecting you as a student?
What did you do in response?	▪ Did you seek out help? From whom, or from where? Why? ▪ During this challenge, did you think back to something you learned before starting college classes? • How did it help? How did it not help? • With whom, or where, did you learn this?

- Please tell me about a time when you have had success and what you think you did to be successful.

Follow-up	**Clarifications**
What successes have you had?	(*NOTE: Probe for <u>anticipated</u> successes if this and below questions do not elicit successes experienced by the student.*) ▪ What about your college classes is going well? ▪ In what ways have you been successful at finding your way at a community college? ▪ In what ways have you had been able to take ownership of your learning? And, to manage your learning? ▪ In what ways have you otherwise had success? ▪ What might be some success that you have had outside of school?

What did you do that made you successful, do you think?	▪ Did you seek out help? From whom, or from where? Why? ▪ During this success, did you think back to something you learned before starting college classes? • How did it help? How did it not help? • With whom, or where, did you learn this?

- Do you feel ready to be at college?

Follow-up	**Clarifications**
In what ways do you feel most ready to be at college?	▪ What do you know, or know how to do, that most helps you to be ready?
In what ways do you feel least ready to be at college?	▪ What do you not know, or not know how to do, that keeps you from being ready?
How do you think you're doing?	▪ What classes are you taking? ▪ How are you doing in those classes? ▪ Can I see an example of work you've been doing in you classes? Or, an example of something you are working on outside of class? ▪ Are you going to class regularly? ▪ What are your plans for next semester? ▪ What are you goals (for example, a vocational certificate, an Associates, transfer to a 4-year college)? Do you think you are making progress toward those goals? How so?

Appendix B

Interview Protocol

Staff Participant related to Student Participant Practices

Thank you for speaking with me today. I hope that you can share your perceptions of [*student participant's full name*] and how ready [s/he] is to be at college and to take college courses.

I would like to examine [*student participant's first name*]'s college readiness in three ways: that is, in terms of her soft skills, her academic capabilities, and her understanding of community college. I will ask a similar set of questions about each of these three forms of college readiness.

Soft skills

- What soft skills have you seen [*student participant's first name*] demonstrate?

Follow-up	**Clarifications**
Can you describe examples or instances of [*student participant's first name*] putting those skills into practice?	▪ What circumstances (or challenges) prompted [her/him] to put those skills into practice? ▪ What exactly did [s/he] do or say? ▪ Was this before or after [her/his] having started to take college courses?
How would you say [*student participant's first name*] developed these skills?	▪ What experiences may have allowed [her/him] to rehearse these skills? ▪ How might County have supported [her/his] development of these skills?

- What soft skills would you say [*student participant's first name*] should most work to improve upon?

Follow-up	**Clarifications**
Can you describe examples or instances of [*student participant's first name*] putting those skills into practice?	▪ In what ways are these skills present in [her/his] practice as student but could get better? ▪ In what ways are the skills absent from [her/his] practice?
What experiences or supports might help [*student participant's first name*] to improve those skills?	

Academic Capabilities

- In what ways has [*student participant's first name*] shown you that [s/he] is academically capable of taking college courses?

Follow-up	**Clarifications**
Can you describe examples or instances of [*student participant's first name*] putting those capabilities into practice?	▪ What circumstances (or challenges) prompted [her/him] to put those capabilities into practice? ▪ What exactly did [s/he] do or say? ▪ Was this before or after [her/his] having started to take college courses?
How would you say [*student participant's first name*] developed these capabilities?	▪ What experiences may have allowed [her/him] to rehearse these capabilities? ▪ How might County have supported [her/his] development of these capabilities?

- What academic capabilities would you say [*student participant's first name*] should most work to improve upon?

Follow-up	**Clarifications**
Can you describe examples or instances of [*student participant's first name*] putting those capabilities into practice?	▪ In what ways are these capabilities present in [her/his] practice as student but could get better? ▪ In what ways are the capabilities absent from [her/his] practice?

What experiences or supports might help [*student participant's first name*] to improve those capabilities?	

College Knowledge

- In what ways has [*student participant's first name*] shown you that [s/he]:
  - Understands the community college's norms and culture; and
  - Knows how to navigate the community college and taking courses there?

Follow-up	**Clarifications**
Can you describe examples or instances of [*student participant's first name*] putting that college knowledge into practice?	▪ What circumstances (or challenges) prompted [her/him] to put that knowledge into practice? ▪ What exactly did [s/he] do or say? ▪ Was this before or after [her/his] having started to take college courses?
How would you say [*student participant's first name*] developed this knowledge?	▪ What experiences may have allowed [her/him] to become knowledgeable in these ways? ▪ How might County have supported [her/his] development of this knowledge?

- In what ways would you say [*student participant's first name*] is less knowledgeable about the community college?

Follow-up	**Clarifications**
Can you describe examples or instances of [*student participant's first name*] putting that knowledge into practice?	▪ In what ways is [her/his] knowledge present in [her/his/ practice but could get better? ▪ In what ways the knowledge absent from [her/his] practice?
What experiences or supports might help [*student participant's first name*] to improve [her/his] knowledge of the community college?	

Appendix C

Interview Protocol

Staff Participant related to County Educational Program

First, I would like to hear from you about what County hopes to teach its students in order to prepare them to succeed at the college level.

- What capabilities help a student to be ready to be at a college and take college classes?

Follow-up	**Clarifications**
Why is it important for students to have those capabilities?	▪ What are they getting ready to do as students? ▪ What scenarios and settings at the community college will those capabilities be useful for, and in what way?
What does it look like when a student puts those capabilities into practice?	▪ Can you provide an example of a way in which you have seen a [*nameless*] student put those capabilities into practice?[52] ▪ What would you like to see your students doing as they engage in their college classes and the college community?

- Which of the capabilities that we just discussed are strongest in students when they come in to County? Which are least present?

Follow-up	**Clarifications**
How do you assess students' college readiness when they come in to County?	▪

There are two main topics that I hope that you will cover. One is what County students do to develop college readiness. I then want to know how County supports that student development.

[52] NOTE: All inquiries that ask about "County students" do so in a broad sense. That is, it is not intended to ask staff participants to identify any given County student.

Let's start by talking about the time leading up to students taking their first college courses:

- What are students doing to _____?

Follow-up	**Clarifications**
…develop their soft skills?[53]	Specifically, through what developmental activities are students: ▪ Taking ownership of their learning (*e.g., goal setting & focus, time management, help seeking*)? ▪ Rehearsing successful learning techniques (*i.e., both individually and collaboratively*)? ▪ Gaining positive attitudes toward learning (e.g., *self-efficacy, self-awareness*)?
… get ready to be in a community college environment?	Specifically, through what developmental activities are students: ▪ Coming to understand the norms and expectations of a community college (*e.g., faculty expectations, work/school balance*)? ▪ Coming to understand the culture of a community college (*e.g., vs. home-life culture, diverse peers and ideas*)? ▪ Rehearsing navigating a community college system (*e.g., help sources, bureaucracy*)?
… become academically college ready?	Specifically, through what developmental activities are students: ▪ Getting the content knowledge needed for college (*e.g., English, math, science*)? ▪ Rehearsing the content-specific skills needed for college (*e.g., lab skills in science*)? ▪ Rehearsing the universal academic skills needed for college (*e.g., reading, writing, computation, critical thinking*)?

- What elements of the County program support these forms of student development?

[53] NOTE: "Soft skills" equate to the study's examination of noncognitive skills. As a ubiquitous part of County's curricula and culture, the faculty, staff, and students at County utilize the term frequently. While each of those individuals may emphasize different skills and vary in how they define the skills, the PI understands that participants will know the term well enough to use it as part of the interview.

- Prior to taking college courses, when and how does County assess for a student's college readiness?

Follow-up	**Clarifications**
What, if any, mechanisms exist for providing feedback along the way to a student and her teachers about how college ready she is?	▪ Can you provide examples relative to (a) soft skills development, (b) academic readiness, and/or (c) college knowledge development? ▪ What benchmarks must students meet at County prior to taking community college coursework?
What, if any, interventions might exist for students showing they are not college ready in some way?	▪

Now, let's talk about what County does to support continued growth in students' college readiness once they are taking college courses:

Follow-up	**Clarifications**
What does County do to support continued growth in students' college readiness once they are taking college courses?	Specifically: ▪ How does County continue to support students in practicing soft skills? ▪ How does County continue to support students in understanding and navigating the community college community? ▪ How does County continue to support students' academic performance?
How are students made aware of those continuing supports?	
In what ways do those continuing supports link back to the components of the County program that supported students before they started their college courses?	• Can you provide examples of how County supports prior to and during student college course taking work together?
In what ways, if any, does County monitor students while they take college courses?	

References

ACT. (2016). *The condition of college & career readiness 2016.* Retrieved from http://www.act.org/content/act/en/research/condition-of-college-and-career-readiness-2016.html

Adelman, C. (2006). *The toolbox revisited : paths to degree completion from high school through college*. Washington, D. C.: Office of Vocational and Adult Education, U.S. Dept. of Education.

Alvarado, S. E., & An, B. P. (2015). Race, Friends, and College Readiness: Evidence from the High School Longitudinal Study. *Race Soc Probl, 7*, 150-167.

An, B. P. (2013). The Influence of Dual Enrollment on Academic Performance and College Readiness: Differences by Socioeconomic Status. *Research in Higher Education, 54*(4), 407-432. doi:http://dx.doi.org/10.1007/s11162-012-9278-z

Annenberg Institute for School Reform, John W. Gardner Center for Youth and Their Communities, & University of Chicago Consortium on Chicago School Research. (2014). *Beyond College Eligibility: A New Framework for Promoting College Readiness. College Readiness Indicator Systems Resource Series*. Retrieved from http://proxy.lib.umich.edu/login?url=https://search.proquest.com/docview/1720066126?accountid=14667

Baber, L. D. (2018). "Living in the Along": Validating Experiences among Urban Community College Students in a College Transition Program. *Community College Review, 46*(3), 316-340. doi:http://dx.doi.org/10.1177/0091552118775813

Bahr, P. R. (2016). *Replacing placement tests in Michigan's community colleges*. Ann Arbor, MI: Center for the Study of Higher and Postsecondary Education, University of Michigan.

Balfanz, R., DePaoli, J. L., Ingram, E. S., Bridgeland, J. M., & Fox, J. H. (2016). *Closing the college gap : A roadmap to postsecondary readiness and attainment* (pp. 48 pages). Retrieved from http://www.eric.ed.gov/contentdelivery/servlet/ERICServlet?accno=ED572785

Barnett, E. A. (2016). *Building Student Momentum from High School into College. Ready or Not : It's Time to Rethink the 12th Grade* (pp. 32 pages). Retrieved from http://www.eric.ed.gov/contentdelivery/servlet/ERICServlet?accno=ED564836

Barnett, E. A., Bucceri, K., Hindo, C., & Kim, J. (2013). *Ten key decisions in creating early colleges: Design options based on research*. New York, NY: National Center for Restructuring Education, Schools and Teaching, Teachers College, Columbia University.

Barnett, E. A., Corrin, W., Nakanishi, A., Bork, R. H., Mitchell, C., & Sepanik, S. (2012). *Preparing High School Students for College An Exploratory Study of College Readiness*

Partnership Programs in Texas. Executive Summary (pp. 19 pages). Retrieved from http://www.eric.ed.gov/contentdelivery/servlet/ERICServlet?accno=ED532398

Barnett, E. A., Fay, M. P., Bork, R. H., & Weiss, M. J. (2013). *Reshaping the College Transition : States That Offer Early College Readiness Assessments and Transition Curricula* (pp. 5 pages). Retrieved from http://www.eric.ed.gov/contentdelivery/servlet/ERICServlet?accno=ED565702

Barnett, E. A., Fay, M. P., Pheatt, L., & Trimble, M. J. (2016). *What we know about transition courses*. New York, NY: Columbia University, Teachers College, Community College Research Center.

Barnett, E. A., Fay, M. P., Trimble, M. J., & Pheatt, L. (2013). *Reshaping the college transition : Early college readiness assessments and transition curricula in four states.* Retrieved from http://www.eric.ed.gov/contentdelivery/servlet/ERICServlet?accno=ED565659

Barnett, E. A., Maclutsky, E., & Wagonlander, C. (2015). Emerging early college models for traditionally underserved students. *New Directions for Community Colleges, 169*, 39-49.

Barnett, E. A., & Stamm, L. (2010). *Dual enrollment: A strategy for educational advancement of all students*. Washington, DC: Blackboard Institute.

Belfield, C. R., & Crosta, P. M. (2012). *Predicting Success in College: The Importance of Placement Tests and High School Transcripts. CCRC Working Paper No. 42*. Retrieved from http://proxy.lib.umich.edu/login?url=https://search.proquest.com/docview/968113257?accountid=14667

Berger, A. R. (2007). *Evaluation of the Early College High School Initiative: Select Topics on Implementation*. Washington, DC: American Institutes for Research.

Berger, A. R., Turk-Bicakci, L., Garet, M., Knudson, J., & Hoshen, G. (2014). *Early College, Continued Success: Early College High School Initiative Impact Study*. Washington, DC: American Institutes for Research.

Berger, A. R., Turk-Bicakci, L., Garet, M., Song, M., Knudson, J., Haxton, C., . . . Cassidy, L. (2013). *Early College, Early Success: Early College High School Initiative Impact Study*. Washington, DC: American Institutes for Research.

Boroch, D., & Hope, L. (2009). *Effective Practices for Promoting the Transition of High School Students to College A Review of Literature with Implications for California Community College Practitioners* (pp. 68 pages). Retrieved from http://www.eric.ed.gov/contentdelivery/servlet/ERICServlet?accno=ED519286

Borsato, G. N., Nagaoka, J., & Foley, E. (2013). College readiness indicator systems framework. *Voices in Urban Education, 38*, 28-35.

Bowles, A., & Brand, B. (2009). *Learning Around the Clock: Benefits of Expanded Learning Opportunities for Older Youth*. Retrieved from http://www.aypf.org/documents/AYPF_ELOs_w-cvr.pdf

Bransford, J. D., Brown, A. L., & Cocking, R. R. (1999). *How People Learn: Brain, Mind, Experience, and School*. Washington, DC: National Academy Press.

Bryk, A. S., Sebring, P. B., Allensworth, E., Luppescu, S., & Easton, J. Q. (2010). A framework of essential supports. In A. S. Bryk, P. B. Sebring, E. Allensworth, S. Luppescu, & J. Q. Easton (Eds.), *Organizing school for improvement: Lessons from Chicago* (pp. 42-78). Chicago, IL: The University of Chicago Press.

Bui, K. V. T. (2002). First-generation college students at a four-year university: Background characteristics, reasons for pursuing higher education, and firstyear experiences. *College Student Journal, 36*(1), 3-11.

Butterfield, L. D., Borgen, W. A., Amundson, N. E., & Maglio, A.-S. T. (2005). Fifty Years of the Critical Incident Technique: 1954-2004 and Beyond. *Qualitative Research, 5*(4), 475-497. doi:http://dx.doi.org/10.1177/1468794105056924

Byrd, K. L., & MacDonald, G. (2005). Defining College Readiness from the Inside Out: First-Generation College Student Perspectives. *Community College Review, 33*(1), 22-I.

Carnevale, A. P., Jayasundera, T., & Gulish, A. (2016). *America's divided recovery: College haves and have-nots*. Washington, DC: Georgetown University Center on Education and the Workforce.

Carnevale, A. P., Smith, N., & Strohl, J. (2010). *Help wanted: Projections of jobs and education requirements through 2018*. Washington, DC: Center on Education and the Workforce, Georgetown Public Policy Institute, Georgetown University.

Carnevale, A. P., Smith, N., & Strohl, J. (2013). *Recover: Job growth and education requirements through 2020*. Washington, DC: Center on Education and the Workforce, Georgetown Public Policy Institute, Georgetown University.

Carpenter, A. M., & Peña, E. V. (2017). Self-authorship among first-generation undergraduate students: A qualitative study of experiences and catalysts. *Journal of Diversity in Higher Education, 10*(1), 86-100.

Castro, E. L. (2013). Racialized Readiness for College and Career: Toward an Equity-Grounded Social Science of Intervention Programming. *Community College Review, 41*(4), 292-310. doi:http://dx.doi.org/10.1177/0091552113504291

Cataldi, E. F., Bennett, C. T., & Chen, X. (2018). *First-generation students: College access, persistence, and postbachelor's outcomes*. (NCES 2018-421). Retrieved from https://nces.ed.gov/pubs2018/2018421.pdf.

Center for Community College Student Engagement. (2013). *A Matter of Degrees: Engaging Practices, Engaging Students (High-Impact Practices for Community College Student Engagement)*. Austin, TX: The University of Texas at Austin, Community College Leadership Program.

Cerrone, K., Nicholas, J. B., & Ramlo, S. (2013). Perspectives contributing to early college high school students' persistence. *The International Journal of Q Methodology, 36*(4), 342-352.

Charmaz, K. (2006). *Constructing grounded theory: A practical guide through qualitative analysis*. London: Thousand Oaks SAGE.

Chen, X., & Carroll, D. C. (2005). *First-Generation Students in Postsecondary Education: A Look at Their College Transcripts. Postsecondary Education Descriptive Analysis*

Report. NCES 2005-171. Retrieved from http://proxy.lib.umich.edu/login?url=https://search.proquest.com/docview/62146809?accountid=14667

Choy, S. (2001). *Students Whose Parents Did Not Go to College: Postsecondary Access, Persistence, and Attainment. Findings from the Condition of Education, 2001*. Retrieved from http://proxy.lib.umich.edu/login?url=https://search.proquest.com/docview/62278483?accountid=14667

Clemens, R. F. (2016). Transitioning from High School to College: Examining the Sources and Influences of Social Capital for a First-Generation Latina Student. *The Qualitative Report, 21*(11), 2044-2072.

Coffman, S. (2011). A Social Constructionist View of Issues Confronting First-Generation College Students. *New Directions for Teaching and Learning*(127), 81-90.

Collier, P. J., & Morgan, D. L. (2008). "Is that paper really due today?": differences in first-generation and traditional college students' understandings of faculty expectations. *Higher Education, 55*(4), 425-446. doi:http://dx.doi.org/10.1007/s10734-007-9065-5

Common Core State Standards Initiative. (2017). About the Standards. Retrieved from http://www.corestandards.org/about-the-standards/

Conley, D. T. (2003). *Understanding university success : A report from Standards for Success : a project of the Association of American Universities and the Pew Charitable Trusts*. Eugene, OR: Center for Educational Policy Research.

Conley, D. T. (2007). *Redefining College Readiness* (pp. 36 p.). Retrieved from http://www.eric.ed.gov/contentdelivery/servlet/ERICServlet?accno=ED539251

Conley, D. T. (2011). *Redefining college readiness* (Vol. 5). Eugene, OR: Educational Policy Improvement Center.

Conley, D. T. (2012). *A complete definition of college and career readiness*. Eugene, OR: Educational Policy Improvement Center.

Conley, D. T. (2014). *A New Era for Educational Assessment. Students at the Center : Deeper Learning Research Series* (pp. 40 pages). Retrieved from http://www.eric.ed.gov/contentdelivery/servlet/ERICServlet?accno=ED559683

Conley, D. T., & Darling-Hammond, L. (2013). *Creating systems of assessment for deeper learning*. Stanford, CA: Stanford Center for Opportunity Policy in Education.

Convertino, C., & Graboski-Bauer, A. (2018). College Readiness versus College Worthiness: Examining the Role of Principal Beliefs on College Readiness Initiatives in an Urban U.S. High School. *Urban Review: Issues and Ideas in Public Education, 50*(1), 45-68.

Cooper, C. R. (2002). Five bridges along students' pathways to college: A developmental blueprint of families, teachers, counselors, mentors, and peers in the Puente Project. *Educational Policy, 16*(4), 607-622.

Cunningham, C. L., & Wagonlander, C. (2000). Establishing and sustaining a middle college high school. *New Directions for Community Colleges, 111*, 41-51.

Davis, J. (2010). The observable behaviors of first-generation college students. *First generation student experience : Implications for campus practice, and strategies for improving persistence and success* (pp. 29-57). Sterling, VA: Stylus.

Deil-Amen, R. (2011a). Beyond Remedial Dichotomies: Are "Underprepared" College Students a Marginalized Majority? *New Directions for Community Colleges*(155), 59-71. doi:http://dx.doi.org/10.1002/cc.458

Deil-Amen, R. (2011b). Socio-Academic Integrative Moments: Rethinking Academic and Social Integration Among Two-Year College Students in Career-Related Programs. *The Journal of Higher Education, 82*(1), 54-91.

Duckworth, A. L., & Quinn, P. D. (2009). Development and Validation of the Short Grit Scale (Grit-S). *Journal of Personality Assessment, 91*(2), 166.

Duncheon, J. C. (2018). "You Have to Be Able to Adjust Your Own Self": Latinx Students' Transitions into College from a Low-Performing Urban High School. *Journal of Latinos and Education, 17*(4), 358-372.

Edgecombe, N. (2019). Demography As Opportunity *CCRC Working Paper No. 106*. Teachers College, Columbia University: Community College Research Center.

Edmunds, J. A. (2010). *A Better 9th Grade: Early Results from an Experimental Study of the Early College High School Model*. Retrieved from http://proxy.lib.umich.edu/login?url=https://search.proquest.com/docview/851224959?accountid=14667

Edmunds, J. A. (2012). Early Colleges: A New Model of Schooling Focusing on College Readiness. *New Directions For Higher Education*(158), 81-89. doi:http://dx.doi.org/10.1002/he.20017

Edmunds, J. A., Arshavsky, N., Lewis, K., Thrift, B., Unlu, F., & Furey, J. (2017). Preparing Students for College: Lessons Learned from the Early College. *NASSP Bulletin, 101*(2), 117-141. doi:http://dx.doi.org/10.1177/0192636517713848

Edmunds, J. A., Unlu, F., Glennie, E., Bernstein, L., Fesler, L., Furey, J., & Arshavsky, N. (2017). Smoothing the Transition to Postsecondary Education: The Impact of the Early College Model. *Journal of Research on Educational Effectiveness, 10*(2), 297-325.

Elmore, R. F. (2000). *Building a new structure for school leadership*. Washington, DC: Albert Shanker Institute.

Engle, J., Bermeo, A., & O'Brien, C. (2006). *Straight from the Source: What Works for First-Generation College Students*. Washington, DC: Pell Institute for the Study of Opportunity in Higher Education.

Engle, J., & Tinto, V. (2008). *Moving Beyond Access: College Success for Low-Income, First-Generation Students*. Washington, DC: Pell Institute for the Study of Opportunity in Higher Education.

Ericsson, K. A., & Charness, N. (1994). Expert performance: Its structure and acquisition. *The American Psychologist, 49*(8), 725.

Falcon, L. (2015). Breaking down barriers: First-generation college students and college success. *The League for Innovation in the Community College, 10*(6).

FitzGerald, K., Seale, N. S., Kerins, C. A., & McElvaney, R. (2008). The critical incident technique: A useful tool for conducting qualitative research. *Journal of Dental Education, 72*(3), 299.

Flanagan, J. C. (1954). The Critical Incident Technique. *Psychological Bulletin, 51*, 327.

Fleischman, S., & Heppen, J. (2009). Improving Low-Performing High Schools: Searching for Evidence of Promise. *The Future of Children, 19*(1).

Gaertner, M. N., & McClarty, K. L. (2015). Performance, Perseverance, and the Full Picture of College Readiness. *Educational Measurement: Issues and Practice, 34*(2), 20-33.

Gay, G. (2018). *Culturally responsive teaching: Theory, research, and practice.* (3rd ed.). New York: Teachers College Press.

Geltner, B. B., Wagonlander, C., & Moore, K. (2014). *Differences that make a difference: how one middle early college serves as a "treasured place" for its at-rsk high school students, staff and community*. Flint, MI: The Charles Stewart Mott Foundation.

George, A. L., & Bennett, A. (2005). *Case studies and theory development in the social sciences*. Cambridge, MA: MIT Press.

Germeijs, V., & Verschueren, K. (2007). High school students' career decision-making process: Consequences for choice implementation in higher education. *Journal of Vocational Behavior, 70*(2), 223.

Gist-Mackey, A. N., Wiley, M. L., & Erba, J. (2018). "You're Doing Great. Keep Doing What You're Doing": Socially Supportive Communication during First-Generation College Students' Socialization. *Communication Education, 67*(1), 52-72. doi:http://dx.doi.org/10.1080/03634523.2017.1390590

Glazer, L., & Grimes, D. (2016). *Michigan's transition to a knowledge-based economy 2007-2014*. Ann Arbor, MI: Michigan Future Inc.

Glynn, J. (2017). *Opening doors: How selective colleges and universities are expanding access for high-achieving, low-income students*: Jack Kent Cooke Foundation.

Goerge, R., Cusick, G. R., Wasserman, M., & Gladden, M. (2007). *After-School Programs and Academic Impact: A Study of Chicago's After School Matters*. Chicago, IL: Chapin Hall Center for Children.

Grady, M. (2016). *How High Schools and Colleges Can Team up to Use Data and Increase Student Success. Ready or Not: It's Time to Rethink the 12th Grade Series*. Retrieved from http://proxy.lib.umich.edu/login?url=https://search.proquest.com/docview/1871571597?accountid=14667

Gremler, D. D. (2004). The Critical Incident Technique in Service Research. *Journal of Service Research : JSR, 7*(1), 65-89.

Gurantz, O., & Borsato, G. N. (2012). Building and Implementing a College Readiness Indicator System: Lessons from the First Two Years of the CRIS Initiative. *Voices in Urban Education, 35*, 5-15.

Hamedani, M. G., & Darling-Hammond, L. (2015). *Social Emotional Learning in High School: How Three Urban High Schools Engage, Educate, and Empower Youth. Research Brief*. Retrieved from https://edpolicy.stanford.edu/publications/pubs/1310

Hammersley, M., & Atkinson, P. (2007). Research design: Problems, cases and samples. *Ethnography: Principles in practice* (3rd ed., pp. 20-40). New York: Routledge.

Harackiewicz, J. M., Barron, K. E., Tauer, J. M., & Elliot, A. J. (2002). Predicting success in college: A longitudinal study of achievement goals and ability measures as predictors of interest and performance from freshman year through graduation. *Journal of Educational Psychology, 94*(3), 562-575.

Harper, S. R., & Newman, C. B. (2016). Surprise, Sensemaking, and Success in the First College Year: Black Undergraduate Men's Academic Adjustment Experiences: [1]. *Teachers College Record, 118*(6), 1.

Harrell, P. E. v., & Forney, W. S. (2003). Ready or not, here we come: Retaining Hispanic and first-generation students in postsecondary education. *Community College Journal of Research and Practice, 27*(2), 147-156.

Hirsch, D. (2017). The High School to College Transition: Minding the Gap. *The New England Journal of Higher Education*. Retrieved from http://www.nebhe.org/thejournal/the-high-school-to-college-transition-minding-the-gap/

Hoff Macan, T., Shahani, C., Dipboye, R. L., & Peek Phillips, A. (1990). College Students' Time Management: Correlations With Academic Performance and Stress. *Journal of Educational Psychology, 82*(4), 760-768.

Hooker, S., & Brand, B. (2009). *Success at Every Step: How 23 Programs Support Youth on the Path to College and beyond*. Washington, DC: American Youth Policy Forum.

Horn, L., & Weko, T. (2009). *On Track to Complete? A Taxonomy of Beginning Community College Students and Their Outcomes 3 Years After Enrolling: 2003–04 Through 2006 (NCES 2009-152)*. Washington, DC: National Center for Education Statistics, Institute of Education Sciences, U.S. Department of Education.

Inkelas, K. K., Daver, Z. E., Vogt, K. E., & Leonard, J. B. (2007). Living-Learning Programs and First-Generation College Students' Academic and Social Transition to College. *Research in Higher Education, 48*(4), 403-434. doi:http://dx.doi.org/10.1007/s11162-006-9031-6

Inman, W. E., & Mayes, L. (1999). The importance of being first: Unique characteristics of first generation community college students. *Community College Review, 26*(4), 3.

Jenkins, S. R., Belanger, A., Connally, M. L., Boals, A., & Duron, K. M. (2013). First-Generation Undergraduate Students' Social Support, Depression, and Life Satisfaction. *Journal of College Counseling, 16*(2), 129-142. doi:http://dx.doi.org/10.1002/j.2161-1882.2013.00032.x

Jennings, J., Locasio, A., Buller, A., & Sartain, E. (2007). *Texas study of the middle college early college expansion grant program: Final report*. Austin, TX: Resources for Learning.

Jerald, C. D. (2006). *Identifying Potential Dropouts Key Lessons for Building an Early Warning Data System. A Dual Agenda of High Standards and High Graduation Rates* (pp. 53 p.). Retrieved from http://www.eric.ed.gov/contentdelivery/servlet/ERICServlet?accno=ED499838

Jobs for the Future. (2017). Early college designs: Reinventing high schools for postsecondary success. Retrieved from http://www.jff.org/initiatives/early-college-designs

John W. Gardner Center for Youth and Their Communities. (2014). *Menu of College Readiness Indicators and Supports. College Readiness Indicator Systems (CRIS) Resource Series*. Stanford, CA: John W. Gardner Center for Youth and Their Communities, Stanford University.

Jones, D. E., Greenberg, M., & Crowley, M. (2015). Early Social-Emotional Functioning and Public Health: The Relationship Between Kindergarten Social Competence and Future Wellness. *American Journal of Public Health, 105*(11), 2283-2290.

Jordan, W. J., Cavalluzzo, L., & Corallo, C. (2006). Community College and High School Reform: Lessons from Five Case Studies. *Community College Journal of Research & Practice, 30*(9), 729-749.

Karp, M. M. (2007). *Learning About The Role Of College Student Through Dual Enrollment Participation: CCRC Working Paper No. 7* Retrieved from https://ccrc.tc.columbia.edu/publications/college-student-role-dual-enrollment.html

Karp, M. M. (2012). "I don't know, I've never been to college!" Dual Enrollment as a College Readiness Strategy. *New Directions For Higher Education, 158*, 21-28.

Karp, M. M. (2016). A Holistic Conception of Nonacademic Support: How Four Mechanisms Combine to Encourage Positive Student Outcomes in the Community College. *New Directions for Community Colleges*(175), 33-44. doi:http://dx.doi.org/10.1002/cc.20210

Karp, M. M., Bickerstaff, S., Rucks-Ahidiana, Z., Bork, R. H., Barragan, M., & Edgecombe, N. (2012). *College 101 Courses for Applied Learning and Student Success. CCRC Working Paper No. 49* (pp. 52 p.). Retrieved from http://www.eric.ed.gov/contentdelivery/servlet/ERICServlet?accno=ED536682

Karp, M. M., & Bork, R. H. (2014). "They Never Told Me What to Expect, so I Didn't Know What to Do": Defining and Clarifying the Role of a Community College Student. *Teachers College Record, 116*, 1-40.

Karp, M. M., Calcagno, J. C., Hughes, K. L., Jeong, D. W., & Bailey, T. R. (2007). *The Postsecondary Achievement of Participants in Dual Enrollment: An Analysis of Student Outcomes in Two States* (pp. 83 p.). Retrieved from http://www.eric.ed.gov/contentdelivery/servlet/ERICServlet?accno=ED498661

Karp, M. M., & Hughes, K. L. (2008a). Information Networks and Integration: Institutional Influences on Experiences and Persistence of Beginning Students. *New Directions for Community Colleges*(144), 73-82.

Karp, M. M., & Hughes, K. L. (2008b). Supporting College Transitions through Collaborative Programming: A Conceptual Model for Guiding Policy. *Teachers College Record, 110*(4), 838-866.

Karp, M. M., Hughes, K. L., & O'Gara, L. (2011). An Exploration of Tinto's Integration Framework for Community College Students. *Journal of College Student Retention: Research, Theory & Practice, 12*(1), 69-86.

Karp, M. M., O'Gara, L., & Hughes, K. L. (2008). *Do Support Services at Community Colleges Encourage Success or Reproduce Disadvantage? An Exploratory Study of Students in Two Community Colleges. CCRC Working Paper No. 10*. Retrieved from

Kemple, J. J., & Snipes, J. C. (2000). *Career Academies Impacts on Students' Engagement and Performance in High School* (pp. 200 p.). Retrieved from http://www.eric.ed.gov/contentdelivery/servlet/ERICServlet?accno=ED441075

Kitsantas, A., Winsler, A., & Huie, F. (2008). Self-Regulation and Ability Predictors of Academic Success during College: A Predictive Validity Study. *Journal of Advanced Academics, 20*(1), 42-68.

Kolb, D. A. (1984). *Experiential learning : experience as the source of learning and development / David A. Kolb*: Prentice-Hall.

Lanford, M. (2019). Making Sense of "Outsiderness": How Life History Informs the College Experiences of "Nontraditional" Students. *Qualitative Inquiry, 25*(5), 500-512. doi:http://dx.doi.org/10.1177/1077800418817839

Lareau, A., & Horvat, E. M. (1999). Moments of Social Inclusion and Exclusion: Race, Class, and Cultural Capital in Family-School Relationships. *Sociology of Education, 72*(1), 37-53.

Lave, J. (1996). Teaching, as learning, in practice. *Mind, Culture, and Activity, 3*(3), 149-164.

Leeds, D. M., & Mokher, C. G. (2020). Improving Indicators of College Readiness: Methods for Optimally Placing Students Into Multiple Levels of Postsecondary Coursework. *Educational Evaluation and Policy Analysis, 42*(1), 87-109. doi:http://dx.doi.org/10.3102/0162373719885648

Leinbach, D. T., & Jenkins, D. (2008). *Using Longitudinal Data to Increase Community College Student Success A Guide to Measuring Milestone and Momentum Point Attainment. CCRC Research Tools No. 2* (pp. 24 p.). Retrieved from http://www.eric.ed.gov/contentdelivery/servlet/ERICServlet?accno=ED499922

Levin, H. M. (2012). More than just test scores. *Prospects, 42*(3), 269-284. doi:http://dx.doi.org/10.1007/s11125-012-9240-z

Locke, L. A., Stedrak, L. J., & Eadens, D. (2014). Latina Students, an Early College High School, and Educational Opportunity: A Case Study. *Journal of Cases in Educational Leadership, 17*(1), 59-71.

London, H. B. (1989). Breaking Away: A Study of First-Generation College Students and Their Families. *American Journal of Education, 97*(2), 144-170.

Longwell-Grice, R., Adsitt, N. Z., Mullins, K., & Serrata, W. (2016). The First Ones: Three Studies on First-Generation College Students. *NACADA Journal, 36*(2), 34-46.

Lowery-Hart, R., & Pacheco, G., Jr. (2011). Understanding the First-Generation Student Experience in Higher Education through a Relational Dialectic Perspective. *New Directions for Teaching and Learning*(127), 55-68. doi:http://dx.doi.org/10.1002/tl.457

Luke, C., Redekop, F., & Burgin, C. (2015). Psychological Factors in Community College Student Retention. *Community College Journal of Research and Practice, 39*(3), 222.

Majors, A. T. (2019). From the Editorial Board: College Readiness: A Critical Race Theory Perspective. *The High School Journal, 102*(3), 183-188. doi:http://dx.doi.org/10.1353/hsj.2019.0005

Mamiseishvili, K. (2010). Effects of employment on persistence of low-income, first-generation college students. *College Student Affairs Journal, 29*(1), 65-74,93.

Mamiseishvili, K. (2012). Academic and Social Integration and Persistence of International Students at U.S. Two-Year Institutions. *Community College Journal of Research and Practice, 36*(1), 15.

Marciano, J. E. (2017). "We're Friends, We Have to be in This Together": Examining the Role of Culturally Relevant Peer Interactions in Urban Youth's College Readiness and Access. *The Urban Review, 49*(1), 169-187. doi:http://dx.doi.org/10.1007/s11256-016-0387-4

Markle, R. (2013). *SuccessNavigator Field Trial: Santa Monica College*: The Center for Academic and Workforce Readiness and Success, Educational Testing Service.

Martinez, J. A., Sher, K. J., Krull, J. L., & Wood, P. K. (2009). Blue-Collar Scholars?: Mediators and Moderators of University Attrition in First-Generation College Students. *Journal of College Student Development, 50*(1), 87-103.

Maxwell, J. A. (2013). *Qualitative research design: An interactive approach* (3rd ed.). Thousand Oaks, CA: Sage Publications.

McCarron, G. P., & Inkelas, K. K. (2006). The Gap between Educational Aspirations and Attainment for First-Generation College Students and the Role of Parental Involvement. *Journal of College Student Development, 47*(5), 534-549.

McMaster, K. N., & Fuchs, D. (2002). Effects of Cooperative Learning on the Academic Achievement of Students with Learning Disabilities: An Update of Tateyama-Sniezek's Review. *Learning Disabilities: Research & Practice, 17*(2), 107-117.

Mehta, S. S., Newbold, J. J., & O'Rourke, M. A. (2011). Why Do First-Generation Students Fail? *College Student Journal, 45*(1), 20-35.

Merç, A. (2015). The Effect of a Learner Autonomy Training on the Study Habits of the First-Year ELT Students. *Educational Research and Reviews, 10*(4), 378-387.

Michigan College Access Network [MCAN]. (2017). *Michigan data dashboard community report: Moving the needle on educational attainment in Michigan*. Lansing, MI: MCAN.

Middle College National Consortium. (2017). Middle College National Consortium: Expanding college access. Retrieved from http://mcnc.us

Miller, V., Fleming, R., & Reed, S. (2013). Mapping the Early College Research Literature. *Community College Journal of Research and Practice, 37*(9), 664.

Mishkind, A. (2014). *Overview: State Definitions of College and Career Readiness*. Retrieved from http://proxy.lib.umich.edu/login?url=https://search.proquest.com/docview/1697504567?accountid=14667

Mobley, C., & Brawner, C. E. (2019). "Life Prepared Me Well for Succeeding": The Enactment of Community Cultural Wealth, Experiential Capital, and Transfer Student Capital by First-Generation Engineering Transfer Students. *Community College Journal of Research and Practice, 43*(5), 353-369. doi:http://dx.doi.org/10.1080/10668926.2018.1484823

Mokher, C., Leeds, D., & Harris, J. (2018). *Assessment of the Florida College and Career Readiness Initiative: 2018 Final Summary Report*. Retrieved from https://proxy.lib.umich.edu/login?url=https://search.proquest.com/docview/2228670340?accountid=14667

Morgan, E. (2016). Why invest in increasing FAFSA completion. Retrieved from http://www.collegeaccess.org/WhyInvestFAFSA

Mwangi, C. A. G. (2015). (Re)Examining the role of family and community in college access and choice: A metasynthesis. *Review of Higher Education, 39*(1), 123-151.

Nagaoka, J., & Holsapple, M. A. (2017). *Beyond academic readiness: Building a broader range of skills for success in college*. Boston, MA: Jobs for the Future.

Nagaoka, J., Roderick, M., & Coca, V. (2009). *Barriers to College Attainment: Lessons from Chicago*. Washington, DC: Center for American Progress.

Nakajima, M. A., Dembo, M. H., & Mossler, R. (2012). Student Persistence in Community Colleges. *Community College Journal of Research and Practice, 36*(8), 591.

Neumann, A. (2014). Staking a Claim on Learning: What We Should Know about Learning in Higher Education and Why. *Review of Higher Education, 37*(2), 249-267.

Nonis, S. A., & Hudson, G. I. (2010). Performance of College Students: Impact of Study Time and Study Habits. *Journal of Education for Business, 85*(4), 229-238.

Nuñez, A.-M. (2005). Negotiating ties: A qualitative study of first-generation female students' transitions to college. *Journal of The First-Year Experience, 17*(2), 87-118.

Nuñez, A.-M. (2009). Latino students' transitions to college: A social and intercultural capital perspective. *Harvard Educational Review, 79*(1), 22-48, 168.

Nuñez, A.-M., Cuccaro-Alamin, S., & Carroll, C. D. (1998). *First-Generation Students: Undergraduates Whose Parents Never Enrolled in Postsecondary Education* (NCES 98-082). Retrieved from http://proxy.lib.umich.edu/login?url=https://search.proquest.com/docview/62527483?accountid=14667

Nuñez, A.-M., & Sansone, V. A. (2016). Earning and Learning: Exploring the Meaning of Work in the Experiences of First-generation Latino College Students. *Review of Higher Education, 40*(1), 91-115.

O'Shea, S. (2016). Avoiding the manufacture of 'sameness': first-in-family students, cultural capital and the higher education environment. *Higher Education, 72*(1), 59-78. doi:http://dx.doi.org/10.1007/s10734-015-9938-y

Orbe, M. P. (2004). Negotiating multiple identities within multiple frames: An analysis of first-generation college students. *Communication Education, 53*(2), 131-149.

Pascarella, E. T., Pierson, C. T., Wolniak, G. C., & Terenzini, P. T. (2004). First-generation college students: Additional evidence on college experiences and outcomes. *The Journal of Higher Education, 75*(3), 249-284. doi:10.1353/jhe.2004.0016

Pascarella, E. T., Wolniak, G. C., Pierson, C. T., & Terenzini, P. T. (2003). Experiences and Outcomes of First-Generation Students in Community Colleges. *Journal of College Student Development, 44*(3), 420-429.

Patton, M. Q. (2002). *Qualitative research and evaluation methods* (3rd ed.). Thousand Oaks, CA: Sage Publications.

Pawson, R., & Manzano-Santaella, A. (2012). A realist diagnostic workshop. *Evaluation, 18*(2), 176-191.

Pawson, R., & Tilley, N. (1997). *Realistic evaluation*. London, UK: Sage Publications.

Pawson, R., & Tilley, N. (2004). *Realist evaluation.* Retrieved from http://www.communitymatters.com.au/RE_chapter.pdf

Peteet, B. J., Montgomery, L., & Weekes, J. C. (2015). Predictors of Imposter Phenomenon among Talented Ethnic Minority Undergraduate Students. *The Journal of Negro Education, 84*(2), 175-186.

Peurach, D. J., & Glazer, J. L. (2012). Reconsidering Replication: New Perspectives on Large-Scale School Improvement. *Journal of Educational Change, 13*(2), 155-190.

Peurach, D. J., & Neumerski, C. M. (2015). Mixing metaphors: Building infrastructure for large scale school turnaround. *Journal of Educational Change, 16*(4), 379-420. doi:http://dx.doi.org/10.1007/s10833-015-9259-z

Pike, G. R., & Kuh, G. D. (2005). First- and Second-Generation College Students: A Comparison of Their Engagement and Intellectual Development. *The Journal of Higher Education, 76*(3), 276-300.

Plank, S. B., & Jordan, W. J. (2001). Effects of Information, Guidance, and Actions on Postsecondary Destinations: A Study of Talent Loss. *American Educational Research Journal, 38*(4), 947-979.

Posey, L. (2012). Middle- and Upper-Middle-Class Parent Action for Urban Public Schools: Promise or Paradox? *Teachers College Record, 114*(1), 43.

Pratt, T. (2017). The Open Access Dilemma. *Education Next, 17*(4), 35-41.

Próspero, M., & Vohra-Gupta, S. (2007). First Generation College Students: Motivation, Integration, and Academic Achievement. *Community College Journal of Research and Practice, 31*(12), 963-975.

Ramsey-White, K. R. (2012). *Exploring College Readiness: Self-Perceptions of Early College Students*. Georgia State University. Retrieved from http://scholarworks.gsu.edu/eps_diss/96 ERIC database.

Redford, J., & Mulvaney Hoyer, K. (2017). *First-generation and continuing-generation college students: A comparison of high school and postsecondary experiences*. (NCES 2018–009). Retrieved from https://nces.ed.gov/pubs2018/2018009.pdf.

Reid, M. J., & Moore, J. L., III. (2008). College Readiness and Academic Preparation for Postsecondary Education: Oral Histories of First-Generation Urban College Students. *Urban Education, 43*(2), 240.

Reome, D. (2012). *First-Generation College Student Success: Exploring Experiences That Promote Community College Degree Attainment.* (Ed.D.), Johnson & Wales University, Ann Arbor. ProQuest Dissertations & Theses Global database. (3499814)

Roderick, M., Nagaoka, J., & Coca, V. (2009). College Readiness for All: The Challenge for Urban High Schools. *The Future of Children, 19*(1), 185-210.

Rodriguez, A. (2015). The Road to Undermatch: Understanding the Differences between White and Latino Student Predictors of Undermatch. *The Journal of Latino - Latin American Studies, 7*(2), 149-168.

Rosenbaum, J. E., & Becker, K. I. (2011). The Early College Challenge: Navigating Disadvantaged Students' Transition to College. *American Educator, 35*(3), 14-20.

Ross, P. T., Yates, E., Derck, J., Finks, J. F., & Sandhu, G. (2016). Doctors of Tomorrow – A Pipeline Program for Getting a Head Start in Medicine. *International Journal of Humanities and Social Science Invention, 5*(9), 33-37.

Saenz, B., Hurtado, S., Barrera, D., Wolf, D., & Yeung, F. (2007). *First in My Family: A Profile of First Generation College Students at Four-Year Institutions Since 1971*. Los Angeles: Higher Education Research Institute, UCLA.

Saleh, M., Lazonder, A. W., & De Jong, T. (2005). Effects of within-class ability grouping on social interaction, achievement, and motivation. *Instructional Science, 33*(2), 105-119. doi:http://dx.doi.org/10.1007/s11251-004-6405-z

Saunders, M., & Serna, I. (2004). Making College Happen: The College Experiences of First-Generation Latino Students. *Journal of Hispanic Higher Education, 3*(2), 146-163. doi:http://dx.doi.org/10.1177/1538192703262515

Savitz-Romer, M. (2012). The Gap between Influence and Efficacy: College Readiness Training, Urban School Counselors, and the Promotion of Equity. *Counselor Education and Supervision, 51*(2), 98-111. doi:http://dx.doi.org/10.1002/j.1556-6978.2012.00007.x

Sawyer, R. K., & Berson, S. (2004). Study Group Discourse: How External Representations Affect Collaborative Conversation. *Linguistics and Education: An International Research Journal, 15*(4), 387-412. doi:http://dx.doi.org/10.1016/j.linged.2005.03.002

Smedley, B. D., Stith, A. Y., Colburn, L., & Evans, C. H. (Eds.). (2001). *The Right Thing to Do, The Smart Thing to Do: Enhancing Diversity in the Health Professions: Summary of the Symposium on Diversity in Health Professions in Honor of Herbert W. Nickens, M.D.* Washington, DC: National Academy Press.

Smith, J. S., & Wertlieb, E. C. (2005). Do First-Year College Students' Expectations Align with Their First-Year Experiences? *NASPA Journal, 42*(2), 153-174.

Smith, W. L., & Zhang, P. (2010). The Impact of Key Factors on the Transition from High School to College among First- and Second-Generation Students. *Journal of The First-Year Experience & Students in Transition, 22*(2), 49-70.

Somers, P., Woodhouse, S., & Cofer, J. (2004). Pushing the Boulder Uphill: The Persistence of First-Generation College Students. *NASPA Journal, 41*(3), 418-435.

Speroni, C. (2011). *Determinants of Students' Success: The Role of Advanced Placement and Dual Enrollment Programs. An NCPR Working Paper*. Retrieved from http://proxy.lib.umich.edu/login?url=https://search.proquest.com/docview/964189563?accountid=14667

Speroni, C. (2012). *High School Dual Enrollment Programs: Are We Fast-Tracking Students Too Fast? NCPR Brief*. Retrieved from http://proxy.lib.umich.edu/login?url=https://search.proquest.com/docview/1037907855?accountid=14667

Stebleton, M. J., & Soria, K. M. (2012). Breaking down Barriers: Academic Obstacles of First-Generation Students at Research Universities. *Learning Assistance Review, 17*(2), 7-20.

Stephens, N. M., Fryberg, S. A., Markus, H. R., Johnson, C. S., & Covarrubias, R. (2012). Unseen disadvantage: How American universities' focus on independence undermines the academic performance of first-generation college students. *Journal of Personality and Social Psychology, 102*(6), 1178-1197. doi:http://dx.doi.org/10.1037/a0027143

Stephens, N. M., Townsend, S. S. M., Markus, H. R., & Phillips, L. T. (2012). A cultural mismatch: Independent cultural norms produce greater increases in cortisol and more negative emotions among first-generation college students. *Journal of Experimental Social Psychology, 48*(6), 1389.

Strayhorn, T. L. (2015). Factors Influencing Black Males' Preparation for College and Success in STEM Majors: A Mixed Methods Study. *Western Journal of Black Studies, 39*(1), 45-63.

Struhl, B., & Vargas, J. (2012). *Taking College Courses in High School: A Strategy for College Readiness*. Boston, MA: Jobs for the Future.

Sy, S. R., Fong, K., Carter, R., Boehme, J., & Alpert, A. (2012). Parent Support and Stress among First-Generation and Continuing-Generation Female Students during the Transition to College. *Journal of College Student Retention: Research, Theory & Practice, 13*(3), 383-398.

Tate, K. A., Caperton, W., Kaiser, D., Pruitt, N. T., White, H., & Hall, E. (2015). An Exploration of First-Generation College Students' Career Development Beliefs and Experiences. *Journal of Career Development, 42*(4), 294-310.

Terenzini, P. T. (1996). First-Generation College Students: Characteristics, Experiences, and Cognitive Development. *Research in Higher Education, 37*(1), 1-22.

The Executive Office of the President. (2014). *Increasing College Opportunity for Low-Income Students: Promising Models and a Call to Action*. Washington, DC: The White House Retrieved from

https://obamawhitehouse.archives.gov/sites/default/files/docs/increasing_college_opportunity_for_low-income_students_report.pdf.

Thompson, C. P., & Ongaga, K. P. (2011). "Flying the Plane While We Build It": A Case Study of an Early College High School. *The High School Journal, 94*(2), 43-57.

Tierney, W. G., Bailey, T., Constantine, J., Finkelstein, N., & Hurd, N. F. (2009). *Helping Students Navigate the Path to College: What High Schools Can Do.* (NCEE 2009-4066). Princeton, NJ: What Works Clearinghouse Retrieved from http://proxy.lib.umich.edu/login?url=https://search.proquest.com/docview/61846771?accountid=14667.

Tracey, T. J., & Robbins, S. B. (2006). The Interest-Major Congruence and College Success Relation: A Longitudinal Study. *Journal of Vocational Behavior, 69*(1), 64-89.

Trockel, M. T., Barnes, M. D., & Egget, D. L. (2000). Health-related variables and academic performance among first-year college students: Implications for sleep and other behaviors. *Journal of American College Health, 49*(3), 125-131.

Unrau, Y. A., Font, S. A., & Rawls, G. (2012). Readiness for college engagement among students who have aged out of foster care. *Children and Youth Services Review, 34*(1), 76-83. doi:http://dx.doi.org/10.1016/j.childyouth.2011.09.002

Vargas, J. (2015). *Why 12th Grade Must Be Redesigned Now - And How*. Boston, MA: Jobs for the Future.

Vasquez-Salgado, Y., Greenfield, P. M., & Burgos-Cienfuegos, R. (2015). Exploring Home-School Value Conflicts: Implications for Academic Achievement and Well-Being among Latino First-Generation College Students. *Journal of Adolescent Research, 30*(3), 271-305. doi:http://dx.doi.org/10.1177/0743558414561297

Venezia, A., & Jaeger, L. (2013). Transitions from High School to College. *The Future of Children, 23*(1), 117-136.

Wang, C.-C. D., & Castaneda-Sound, C. (2008). The Role of Generational Status, Self-Esteem, Academic Self-Efficacy, and Perceived Social Support in College Students' Psychological Well-Being. *Journal of College Counseling, 11*(2), 101.

Wang, T. R. (2014). 'I'm the Only Person From Where I'm From to Go to College': Understanding the Memorable Messages First-Generation College Students Receive From Parents. *Journal of Family Communication, 14*(3), 270-290. doi:http://dx.doi.org/10.1080/15267431.2014.908195

Warburton, E. C., Bugarin, R., Nuñez, A.-M., & Carroll, C. D. (2001). Bridging the Gap: Academic Preparation and Postsecondary Success of First-Generation Students. *Education Statistics Quarterly, 3*(3), 73-77.

Warner, M., Caspary, K., Arshan, N., Stites, R., Padilla, C., Patel, D., . . . Adelman, N. (2016). *Taking stock of the California Linked Learning District Initiative. Seventh-year evaluation report*. Menlo Park, CA: SRI International.

Wechsler, H. S. (2001). *Access to success in the urban high school: The middle college movement*. New York, NY: Teachers College Press.

Weiss, M. J., Mayer, A. K., Cullinan, D., Ratledge, A., Sommo, C., & Diamond, J. (2015). A Random Assignment Evaluation of Learning Communities at Kingsborough Community College--Seven Years Later. *Journal of Research on Educational Effectiveness, 8*(2), 189-217.

Weiss, R. S. (1994). *Learning from strangers: The art and method of qualitative interview studies*. New York: The Free Press.

Welton, A. D., & Martinez, M. A. (2014). Coloring the College Pathway: A More Culturally Responsive Approach to College Readiness and Access for Students of Color in Secondary Schools. *The Urban Review, 46*(2), 197-223. doi:http://dx.doi.org/10.1007/s11256-013-0252-7

Welton, A. D., & Williams, M. (2015). Accountability Strain, College Readiness Drain: Sociopolitical Tensions Involved in Maintaining a College-going Culture in a High "Minority", High Poverty, Texas High School. *The High School Journal, 98*(2), 181-204.

Whitehead, P. M., & Wright, R. (2017). Becoming a College Student: An Empirical Phenomenological Analysis of First Generation College Students. *Community College Journal of Research and Practice, 41*(10), 639-651. doi:http://dx.doi.org/10.1080/10668926.2016.1216474

Williams, J. D., & Takaku, S. (2011). Help Seeking, Self-Efficacy, and Writing Performance among College Students. *Journal of Writing Research, 3*(1), 1-18. doi:http://dx.doi.org/10.17239/jowr-2011.03.01.1

Williams, M. M. (2014). *Accelerated college preparation: Examining Middle College High School alumni perception of their college readiness and transition to college.* (Ph.D. dissertation Ph.D.), University of Illinois at Urbana-Champaign. Dissertations & Theses @ CIC Institutions; ProQuest Dissertations & Theses Global database. (3646700)

Wolk, R. A. (2005). *"It's Kind of Different": Student Experiences in Two Early College High Schools*. Boston, MA: Jobs for the Future.

Woodcock, J. B., & Beal, H. K. O. (2013). Voices of Early College High School Graduates in Texas: A Narrative Study. *The High School Journal, 97*(1), 56-76.

Yamamura, E. K., Martinez, M. A., & Saenz, V. B. (2010). Moving beyond high school expectations: Examining stakeholders' responsibility for increasing Latina/o students' college readiness. *High School Journal, 93*(3), 126-148.

Yosso, T. J. (2005). Whose culture has capital? A critical race theory discussion of community cultural wealth. *Race, Ethnicity and Education, 8*(1), 69-91. doi:http://dx.doi.org/10.1080/1361332052000341006

Zeidenberg, M., Jenkins, D., & Calcagno, J. C. (2007). *Do Student Success Courses Actually Help Community College Students Succeed? CCRC Brief. Number 36*. Retrieved from http://proxy.lib.umich.edu/login?url=https://search.proquest.com/docview/62030990?accountid=14667