Career and College Readiness Counseling in P–12 Schools
Second Edition

Jennifer R. Curry, PhD
Amy Milsom, DEd, LPC-S, NCC

Praise for the First Edition:

"Serves as an excellent foundational text…I am very thankful that the authors wrote this text. [It] is written for school counselors by school counselor educators!"
—**Gene Eakin,** PhD, School Counseling Program Lead, Oregon State University

"The school counseling focus makes it unique….This is…a great improvement to other texts I've used and I plan to continue using it."
—**Dr. Carolyn Berger,** Chair, Department of Counseling, Nova Southeastern University

Fully updated to serve the needs of school counselors in training, this remains the only text to present a comprehensive, developmental, and practical approach to preparing school counselors to conceptualize the career development and college readiness needs of P–12 students. The second edition reflects the ASCA's new Mindsets & Behaviors for Student Success, which focuses on college and career readiness standards for all students, 2016 CACREP Standards, and the 2015 Every Student Succeeds Act. The text is uniquely grounded in developmental, ecosystemic, and career theories as a basis for career interventions.

Considering the range of psychosocial, cognitive, and academic development spanning P–12 students, the authors review relevant developmental and career theories as a foundation for the design of sequential and developmentally appropriate career and college readiness curricula and interventions. The text provides school counselors and educators concrete examples of how to select, implement, and evaluate the outcomes of interventions grounded in various career counseling theories and addresses career development and college readiness needs by grade level. Also included is expanded information on diversity; reflections and advice from actual school counselors; updated statistics, references, and appendices; and an updated Instructor's Manual, test bank, and PowerPoint slides.

New to the Second Edition:

- Features a "Building a College-Going Culture" section that expands coverage on college readiness counseling
- Reflects updated legislation and policy information including ASCA's new Mindsets & Behaviors for Student Success, 2016 CACREP Standards, 2015 Every Student Succeeds Act, and the Reach Higher Initiative
- Completely new chapter on college and career decision making
- "Voices from the Field" highlighting experiences from actual school counselors
- Enhanced instructor resources including Instructor's Manual, test bank, and PowerPoint slides

Key Features:

- The only comprehensive text devoted to career and college counseling for school counselors; written by former school counselors
- Disseminates current data and research focusing on college readiness needs of diverse populations
- Includes interventions grounded in theory and connected to national standards

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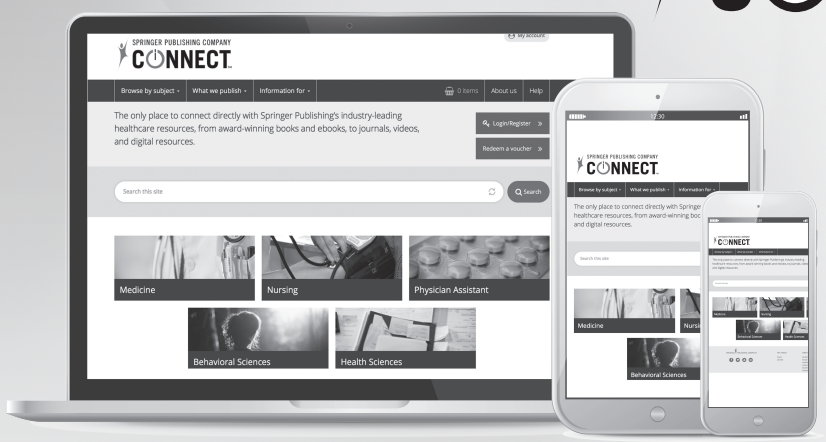

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Jennifer R. Curry, PhD, is an associate professor in the counselor education program at Louisiana State University. Her professional experience includes investigating sexual assault of children ages 11 and under, and serving as a professional school counselor in elementary, middle, and high school settings. Her research interests include career and college readiness and school counselor development. She has published three books: *P–12 Career Counseling*, published by Springer; *African Americans Career and College Readiness: the Journey Unraveled*, coedited with M. Ann Shillingford-Butler; and *Integrating Play Therapy in Comprehensive School Counseling Programs,* coedited with Laura Fazio-Griffith. She has presented her work nationally and internationally on a wide range of school counseling topics at over 50 professional conferences. Additionally, she has served as guest editor of the American School Counselor Association's (ASCA) *Professional School Counseling* journal and as an editorial board member for 6 years. Dr. Curry has also served as a delegate of ASCA's national assembly, president of the Louisiana School Counselor Association, and president of the Association for Spiritual, Ethical, and Religious Values in Counseling. She is the recipient of the Vanderbilt's Roger Aubrey Northstar Award, the American Counseling Association's Ross Trust Award for School Counseling, the Biggs-Pine publication award, ASERVIC's Meritorious Service Award and Judi Miranti Lifetime Service Award, LSU's College of Education Early Career Award, Louisiana School Counselor Association's Publication Award, and Louisiana Counseling Association's Advocacy Award.

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For Daniel, I hope you will always explore your options, especially when your path becomes unclear or confusing. In the moments of your life when you seek clarity, the light of adventure will shine before you; and, if you listen with an open mind and heart, the music of possibility will play the song of your future.

—Jennifer R. Curry

Contents

Preface

Our decision to write this book stemmed from our desire to provide school counselors with a resource that could help them easily conceptualize the career and college readiness needs of P–12 students and design relevant and meaningful interventions. We wanted to develop a book that not only was practical but also pushed readers to be intentional in their work. Further, we believed it was important to respond to national initiatives that emphasize a focus on career and college readiness. The unique aspect of our book, compared to many other career counseling textbooks, is that we present a comprehensive, integrated, and practical approach to counseling, specifically targeting career and college readiness in P–12 schools.

In this book, our second edition, we continue to provide a review of developmental, ecosystemic, and career theories to inform relevant P–12 career and college readiness interventions. Given the variation that exists in the psychosocial, cognitive, and academic development of P–12 students, we review numerous developmental theories and assist readers in using them as a foundation to design sequential and developmentally appropriate career and college readiness curricula and interventions. We also help readers understand the ecosystemic influences (e.g., family, school, community, society) on career development and college readiness, and we discuss both why it is important to involve various stakeholders in career and college readiness initiatives and how to involve them. Finally, we provide readers with concrete examples of how to apply various career counseling theories when working with P–12 students.

We start this book with six foundational chapters in which we review (a) current data and issues related to college and career readiness, (b) information to assist with postsecondary planning and career and college advising, (c) professional preparation standards for individuals who will provide career and college readiness interventions, (d) cultural considerations in career and college readiness, (e) career and college readiness assessment, and (f) career and college readiness curriculum development. We then address career development and college readiness needs by grade level. Our focus in each grade level chapter is to help readers apply knowledge of ecosystems, developmental theories, and career theories, and identify ways that multiple stakeholders can become involved in career and college readiness interventions. We also provide concrete, practical examples, including case examples as well as Voices From the Field written by practicing school counselors to demonstrate some of the concepts and interventions we highlight in each chapter.

We greatly enjoyed writing this book, but it was challenging at times for us to decide in which chapter to include certain information. In that vein, we encourage readers not to limit themselves to implementing career and college readiness interventions exactly as we outline them. Many of the activities and ideas we share could be applicable across numerous grade levels if modified to accommodate developmental differences. Also, P–12 students can benefit from repetition, so it never hurts to target something more than once. Our hope is that both preservice and practicing school counselors find this book useful in helping identify career and college readiness needs and design developmentally appropriate interventions that are grounded in theory and research.

In addition to the textbook, we have provided an Instructor's Manual and PowerPoints intended to support instructors in developing a graduate level course on P–12 career and college readiness. The manual includes a sample syllabus that reflects the content of the textbook. We designed this sample course with a number of useful tools for each chapter including discussion questions, project-based activities, quizzes and essay questions, and social media that may be useful for teaching this course. These materials may also be additive to an existing course as supplemental materials. **The Instructor's Resources are available to qualified instructors by e-mailing textbook@springerpub.com.**

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ONE

P–12 Career and College Readiness: Ecosystemic, Developmental Considerations

In the book *Callings: The Purpose and Passion of Work* (2016), Dave Isay, the founder of StoryCorps, shares transcribed interviews conducted with individuals from many walks of everyday life who work in a variety of careers. Individuals in Isay's book range from a surgeon, bridgetender, "street" telescopist, and garbage collector, to a man who filets salmon every day. The common thread throughout the book is the transformative power of the careers to empower people to impact their communities. Throughout the interviews in the book, individuals convey how their work has helped them to have hope, change their own circumstances, and recognize how much their contributions matter to their friends, family, patients, clients, and society at large.

Work should be an exciting blend of challenge and accomplishment that is engaging and that meets an individual's personal and professional growth needs. Beyond providing fiscal support, a person's chosen career ideally should provide mental stimulation, a creative outlet, an opportunity to contribute to society and the well-being of others, and feelings of personal value, pride, mattering, and mastery (Curry & Bickmore, 2012; Myers, Sweeney, & Witmer, 2000). When individuals make informed career decisions based on an assessment of aptitude, values, interests, and person–environment fit, they are more likely to be satisfied with their careers and be committed long term to their career choices.

To ensure students' future career success, contemporary schools need to offer diverse curricula and educational options that afford students opportunities to develop comprehensive skills and competencies to meet the demands of the 21st century workplace. As global economies, industry, and technology change, so must the preparation of students (Akos, Niles, Miller, & Erford, 2011). Johnson (2000) noted that employment in the future will include more contractual work, more temporary assignments, and decentralized work locations (e.g., site or field based, home office) rather than stable, long-term appointments. Thus, young adults entering the workforce must be more flexible, adaptable, and committed to lifelong learning as they approach postsecondary life (Johnson, 2000).

Yet, many students and families are concerned about what preparation is required to be successful in the workforce of the future. They also feel confusion about the college payoff and the value of a college degree. The costs of postsecondary education and training in comparison to the income afforded to college graduates and the employment rates of degree earners has come under heavy scrutiny in recent years. In fact, much of the national discourse on (a) *who* should pay for college and (b) *how* to pay for college is very politically charged (Blumenstyk, 2015). Moreover, college access and equity remains at the forefront of these debates.

In discussing trends in higher education, Brock (2010) indicated that although access to higher education has greatly improved in recent years, success (measured by college retention and degree completion) has not improved. Demographically, postsecondary schools are more diverse than ever, but Brock (2010) discussed how most of that diversity is accounted for by enrollment at 2-year colleges and less selective institutions. Women now outnumber men at 4-year institutions, but women and individuals from minority populations are overrepresented at 2-year colleges. When considering college readiness, practitioners would be remiss if they neglected to identify the unique needs of populations like first-generation college students, English-language learners (ELLs), students with identified disabilities, and students from lower socioeconomic backgrounds, to name a few. Moreover, according to the National Poverty Center (using data from the U.S. Census Bureau) in 2014, more than one in five children in the United States lived in poverty. Students living in poverty may have fewer familial resources to facilitate career and college readiness in the home. Therefore, school counselors need to be prepared to assist those students through equity-based programming. We continue to examine the needs of these and other specific populations throughout this book.

Although many researchers, educators, and policy makers agree that career and college readiness are essential components of a P–12 education, there is no clear definition of what this means. Because the terms *college readiness* and *career readiness* are distinct enough from each other, we define them separately. Most of what has been written about college readiness focuses on readiness to succeed at 4-year institutions. Conley (2007) proposed that the construct of *college readiness* is multifaceted, with academic skills being only one component. He wrote that:

> The college-ready student envisioned by this definition is able to understand what is expected in a college course, can cope with the content knowledge that is presented, and can take away from the course the key intellectual lessons and dispositions the course was designed to convey and develop. In addition, the student is prepared to get the most out of the college experience due to a thorough understanding of the culture and structure of postsecondary education and the ways of knowing and intellectual norms that prevail in this academic and social environment. The student has both the mindset and disposition necessary to enable this to happen. (pp. 5–6)

College preparation expectations differ depending on whether students attend 4-year colleges, 2-year colleges, or vocational and technical schools. Aside from obvious academically related differences among 4-year, 2-year, and vocational/technical schools, Conley's definition of college readiness seems broad enough to apply to various types of postsecondary education. In essence, he suggested that on top of possessing requisite academic and higher order thinking skills that enable students to retain and apply knowledge and skills, students do better when they have an idea of what to expect and are committed to developing the skills and knowledge to successfully navigate postsecondary school. We believe that better preparation for college via P–12 interventions could help to improve these success rates, and we discuss numerous interventions throughout this book.

In addition to college readiness, defining *career readiness* is of vital importance. According to the Association for Career and Technical Education (ACTE, 2010),

> Career readiness involves three major skill areas: *core academic skills* and the ability to apply those skills to concrete situations in order to function in the workplace and in routine daily activities; *employability skills* (such as critical thinking and responsibility) that are essential in any career area; and *technical, job-specific skills* related to a specific career pathway. (p. 1)

Regarding academics, the ACTE (2011) emphasized that basic math and English/language arts skills are critical for all students planning to enter the workforce. Additionally, ACTE noted collaboration, professionalism, ability to use technology, responsibility, flexibility, and problem solving as important employability skills.

Students who choose not to pursue college or technical school need to possess academic, employability, and technical skills upon high school graduation in addition to possessing basic job search knowledge and skills (e.g., fill out a job application, write a resume and cover letter, search for job openings, answer interview questions appropriately) to secure employment. As mentioned, for students who do intend to pursue college, academic skills and employability skills will be necessary by graduation in order for them to be successful in college.

CURRENT TRENDS IN CAREER AND COLLEGE READINESS

Before we focus on interventions that may help students develop the skills and knowledge to be successful in careers and college, we want to provide an overview of what students do after high school. As we present the information that follows, you will see fairly consistent trends. Specifically, gaps in achievement and opportunity for minorities and individuals from lower socioeconomic groups are reflected in much of the data. These gaps unfortunately start during P–12 education and are demonstrated in high school matriculation data. According to the U.S. Census Bureau's *Statistical Abstract*

of the United States (2011), in 2010, 87.1% of citizens ages 25 or older had completed a high school degree. However, high school graduation rates were reported at 88.9% for Asians, 87.6% for Whites, 84.2% for Blacks, and 62.9% for Hispanics. This is concerning as individuals without a high school diploma are at a disadvantage when it comes to career outcomes; they earn less and are more likely to be unemployed than high school graduates. We explore this issue later in this chapter.

College Attendance and Degree Attainment

According to a summary of U.S. Bureau of Labor Statistics (Ryan & Bauman, 2016), by the year 2024 there will be a 13.8% increase in jobs requiring a master's degree, and a 12.2% increase in jobs requiring a doctoral degree, but only a 3.9% increase in jobs requiring only a high school diploma or equivalency (i.e., office and administrative support, production occupations). Carnevale, Smith, and Strohl (2010) reported that by the year 2018, the United States will need 22 million new college degree earners, but we will most likely be short by three million. The shortage will be based on an increase in the number of retirees coupled with the demand by employers to hire workers with higher levels of education and training. Ryan and Bauman found that of people ages 25 and older in 2015, approximately 42.3% had completed an associate's degree or higher but only 12.0% had completed a graduate or professional degree. These data are in sharp contrast to the estimations of occupations aforementioned that will require advanced degrees; thus, one may deduce that of the students currently pursuing postsecondary education, many are not seeking the level of degree necessary for the demands of the workforce. Compounding this issue, of students enrolled in college, an estimated 40% attend community colleges, but for students whose families earn less than $40,000 annually, 50% attend community colleges. The information from Carnevale et al. coupled with these data suggest that an increase in number of people pursuing college degrees, and in particular advanced degrees, will be important for the future. Additionally, efforts to address issues related to college accessibility for diverse populations, including individuals from low-income families, will be equally important.

College attendance rates have increased in recent years. The Chronicle of Higher Education (2011) reported an overall average growth rate of 39% in undergraduate college enrollment (2-year and 4-year colleges) from 1999 to 2009; during that time frame, growth rates for enrollment in graduate school averaged 36%. Average growth rates for undergraduate enrollment were 93% for Hispanic students and 78% for Black students; growth rates for American Indians and Asians averaged 45%, and rates for Whites were the lowest at 24%. Despite increased college enrollment growth for Hispanics and Blacks, smaller percentages of minority students attend college compared to their majority peers. That is, the average college enrollment in 2009 was 41% of the U.S. population. Breaking down the percentages by specific subgroups, we see that 45% of White students, compared to 38% of Black and 28% of Hispanic students, were

enrolled in college. Carnevale et al. (2010) also noted that college education attainment continues to elude individuals from lower socioeconomic classes, with the greatest number of college graduates coming from the middle and upper classes.

According to the U.S. Census Bureau (2011), only 29.9% of U.S. citizens had attained a 4-year college degree. Four-year college degree attainment rates were reported as 52.4% for Asians, 30.3% for Whites, 19.8% for Blacks, and 13.9% for Hispanics (with intragroup differences identified among Cubans, Puerto Ricans, and Mexicans). Although we have no specific knowledge regarding the causes for these differences, numerous intrapersonal and environmental factors, to be discussed later, likely play important roles in the career and college success of these individuals.

We want to examine more specifically the concern expressed by Brock (2010) presented earlier in this chapter related to stagnant college success rates (i.e., retention and completion). In their longitudinal study of students attending and matriculating through college in 2008 to 2009, the National Center for Education Statistics (NCES, 2011a) revealed that 44% completed their bachelor's degree in 48 months, 23% in 49 to 60 months, and 9% within 61 to 72 months. A disheartening 24% did not finish within 72 months (6 years). Interestingly, approximately 30% of all students started their degrees at 2-year schools, and those who started at 2-year schools tended to take longer to complete their degrees (e.g., 50.6% of students who started at a 4-year school completed their degree in 4 years, compared to only 25.4% of students who started their degrees at 2-year schools). Myriad possible explanations exist for these differences in time to completion. Research suggests, however, that the types of students who are more likely to attend community college (i.e., those of nontraditional age, first-generation college students, single parents, veterans, and students from low socioeconomic status [SES] families) may have to attend part time and may have to devote more time to work or family to the exclusion of solely focusing on school (Blumenstyk, 2015).

Examining the data (NCES, 2011a) more closely, as parental educational attainment increases, so does degree completion (e.g., 20% of students whose parents attained a high school diploma or less completed their degrees compared to 29.8% of students whose parents had a graduate or professional degree). Furthermore, the data suggested that Black and Hispanic students who completed their degrees tended to have parents with less education than did their White and Asian counterparts (e.g., approximately 38% of Black and Hispanic students reported parents having a bachelor's degree or higher, compared to approximately 60% of the White and Asian students). Black and Hispanic students also were more likely to have dependents than were White and Asian students.

NCES (2011a) did not reveal the reason it takes some students longer than others to matriculate or why some students do not complete college at all. As mentioned previously, and based on the trends noted, it seems likely that a number of intrapersonal and environmental factors affect long-term career and college outcomes for students. We discuss many of these factors throughout

this book. One major concern, however, is that many students don't appear to be ready to do college level work.

In fact, college instructors estimate that up to 42% of college students are not adequately prepared by their high schools to meet college course expectations (Hart Research Associates, 2005). Of interest, nearly 90% of graduating seniors in the United States take the ACT®, an assessment that can provide a comparison of students' achievement in relation to Math, Science, Reading, and English college readiness benchmarks. Based on a report released by ACT, Inc. (2015), *The Condition of College and Career Readiness 2015*, 40% of students achieved at or above the minimum college readiness benchmark scores in three or four content areas. More specifically, 64% of students taking the ACT met the English benchmark, 46% met the Reading benchmark, 42% met the Math benchmark, and 38% met the Science benchmark. Unfortunately, 31% of high school graduates who took the ACT did not meet benchmarks in any of the four content areas. While it is difficult to ascertain the exact reasons for these trends, one alarming concern noted by ACT in the executive summary of *The Forgotten Middle* (ACT, Inc., 2008), was that only 2 out of 10 eighth-grade students are actually on track to take the courses in high school that will prepare them for college. In other words, many of our middle and high school students are not taking courses that are rigorous enough to prepare them for postsecondary education options. We revisit this problem throughout this book.

Career and Employment Outcomes

What happened to the students who did not graduate from high school or who did not attend college? According to an executive summary of the Georgetown University Center on Education and the Workforce report *Projections of Jobs and Education Requirements Through 2018* (Carnevale et al., 2010), individuals who do not attend some college and have only a high school diploma or less are mainly relegated to work in three main occupation clusters: food and personal services, sales and office support, and blue-collar employment. Further, inasmuch as the college payoff has been questioned, the cost of not going to college is undebatable. Tabulating data collected in the March 2013 *Current Population Survey*, the Pew Research Center (2014) noted three distinct and concerning issues for individuals ages 25 to 32 who held only a high school diploma: (a) they earned far less annual median income, (b) they were substantially more affected by unemployment rates, and (c) they were significantly more likely to live in poverty (see Figures 1.1–1.3, respectively). The U.S. Bureau of Labor Statistics (2015) revealed that in a 10-year span from 2003 to 2013, a rising wage inequality existed between the lowest and highest paid workers in the United States. In particular, annual wages above the 90th percentile increased 4.6% while those in the lowest 10th percentile decreased by 2.2% when adjusted for inflation.

FIGURE 1.1 Disparity Among Millennials Ages 25 to 34, by Education Level in Terms of Annual Earnings

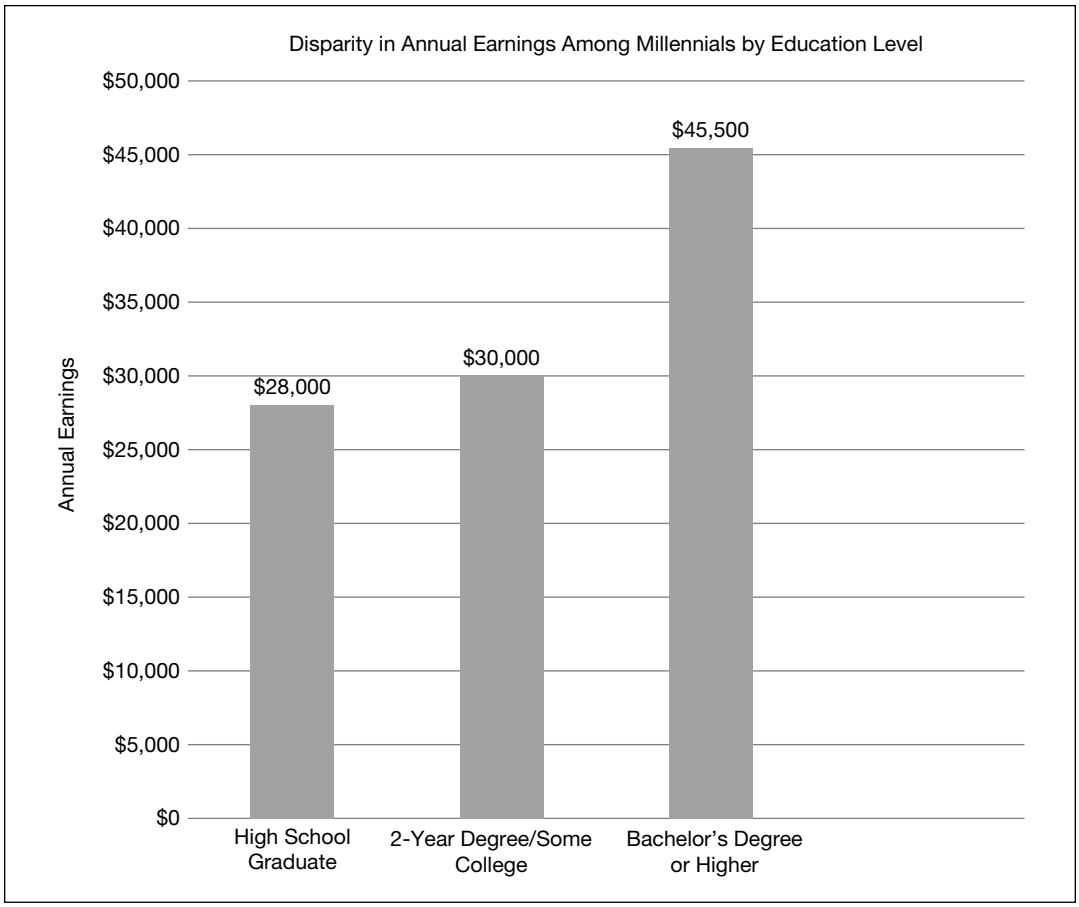


FIGURE 1.2 Unemployment Rates Among Individuals Ages 25 to 34, by Degree Attainment

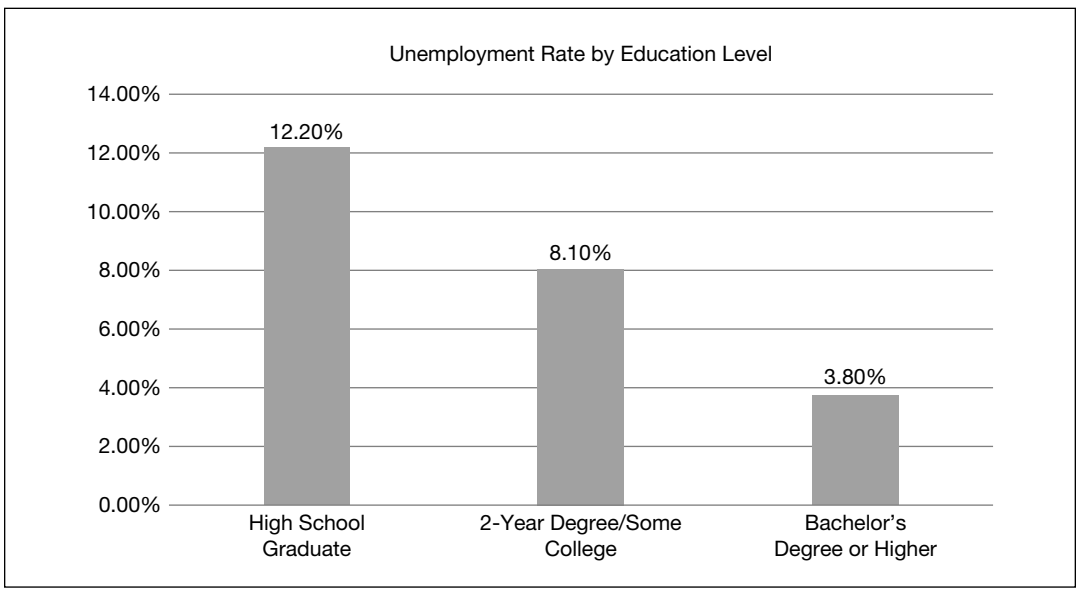
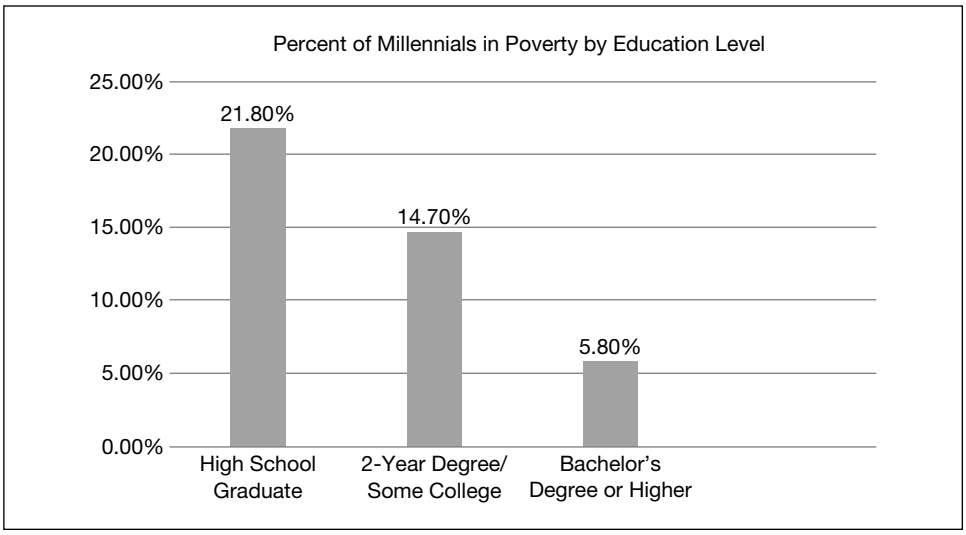


FIGURE 1.3 Percent of Millennials Ages 25 to 34 Living in Poverty, by Education Level



Indeed, employment and income both highly correlate with education attainment. Based on NCES (2014) data, trends in employment by education from 1975 to 2014 have a distinct pattern. In 2014, individuals ages 25 to 34 with a bachelor's degree or higher had an employment rate of 84%, those with some college had an employment rate of 74.5%, those with high school diplomas had an employment rate of 68.2%, and those without high school completion had employment rates of 57.8%. These same data, collected all the way back to 1975, are fairly stable over time; the same degrees and employment rates in 1975 were, respectively, 82%, 71.7%, 65.5%, and 52.9%.

Noteworthy, a significant number of individuals ages 18 to 24 with high school diplomas or less were at historically low employment levels from 2009 to 2014 (NCES, 2014). This is likely due to the impact of the economic recession. While unemployment for individuals with high school diplomas remained stable at rates between 9% and 14% from 1995 to 2009, in 2009, that rate rose sharply to 22.7% and decreased slightly to 21.1% through 2014. These data reflect that during recessions, the most economically vulnerable populations are those groups with the lowest degree attainment.

With regard to career outcomes for college graduates, of those students completing their bachelor's degrees in 2013, 72.1% were employed in full-time jobs. Comparatively, 67.5% of individuals earning associates degrees were in full-time jobs and 61.7% of high school completers were in full-time jobs (NCES, 2015). Nevertheless, what these numbers don't reflect is whether or not individuals were hired in their fields of study, what their advancement opportunities look like, how their occupations are projected to grow, and what skills they will need to advance in order to remain employable.

Another consideration, beyond employability issues, is that the disparity of earnings across ethnic groups, race, and gender persists (see Figure 1.4). Although we know who is getting hired based on their level of education,

the divergence of pay across groups is more apparent when we view disaggregated data. For example, women continue to earn significantly less than men, regardless of race or ethnicity (American Association of University Women, 2016; U.S. Bureau of Labor Statistics, 2015). Additionally, according to an executive summary of Georgetown University's Center on Education and the Workforce, *The College Payoff: Education, Occupations, Lifetime Earnings* (Carnevale, Rose, & Cheah, 2011), women, African Americans, and Latinos continue to earn less than White and Asian males even when they have similar degree attainment and work in the same occupations Nevertheless, regardless of gender, race, or ethnicity, the level of education achieved drives earnings, and generally, for most occupations, the higher the degree, the greater the income (see Table 1.1).

FIGURE 1.4 Median Usual Weekly Earnings of Women and Men Who Are Full-Time Wage and Salary Workers, by Race and Hispanic or Latino Ethnicity, 2014 Annual Averages

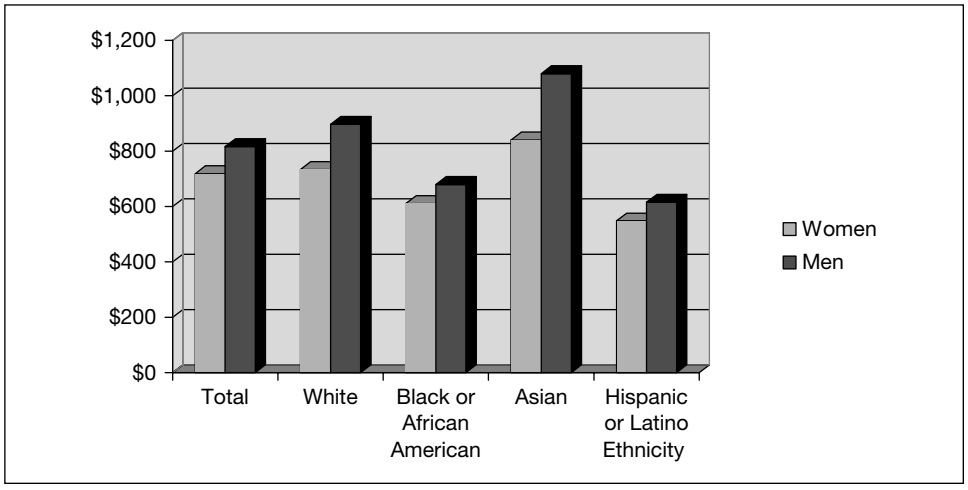


TABLE 1.1 Lifetime Earnings by Educational Attainment Based on Race and Ethnicity

Degree Earned	Asian ($)	Latino ($)	African American ($)	White ($)
Less than high school	950,000	875,000	950,000	1,200,000
High school diploma	1,150,000	1,160,000	1,200,000	1,333,000
Some college/ no degree	1,450,000	1,400,000	1,350,000	1,600,000
Associate's	1,650,000	1,550,000	1,500,000	1,750,000
Bachelor's	2,250,000	1,800,000	1,850,000	2,400,000
Master's	3,100,000	2,500,000	2,400,000	2,700,000
Doctorate	3,500,000	2,900,000	2,850,000	3,500,000
Professional	3,800,000	2,500,000	2,850,000	3,750,000

Source: Adapted from Carnevale et al. (2011).

FEDERAL INITIATIVES

As career and college readiness has gained importance in the U.S. educational discourse, federal policy has changed to give prominence to P–12 student development in these areas. Although innumerable state, regional, and district level policies exist that should be considered when planning career and college interventions, we will focus on current federal initiatives that school counselors need to understand for effective practice. In this section, we highlight the No Child Left Behind (NCLB) Act, the Every Student Succeeds Act (ESSA), the National Math and Science Initiative (NMSI), and the Reach Higher Initiative.

No Child Left Behind Act

The NCLB Act of 2001 (PL 107-110) was signed into federal law in January 2001 (U.S. Department of Education, 2004). The overarching goal of this legislation, a reauthorization of the Elementary and Secondary Education Act, was to improve academic achievement and to focus attention on minority populations (e.g., second language learners, migratory children, children with disabilities) to help close the achievement gap. The most salient points of this law were: (a) increased accountability—specifically in relation to student proficiency in reading and math; (b) more choices for parents and students—students can change schools if the one they attend is deemed failing; and (c) putting reading first—all students should be competent readers by third grade. NCLB instituted a 12-year time frame for schools to close the achievement gap and have all students achieving at proficient levels (Martin & Robinson, 2011). A major criticism of NCLB is that because the main focus was academics, particularly strengthening math and reading as measured through standardized testing, less emphasis was placed on learning in nontested subjects such as arts, physical education and health, music, social studies, science, and foreign language.

Every Student Succeeds Act

The ESSA (PL 114-95) was signed into law by President Barack Obama on December 10, 2015. It is the latest reauthorization of the Elementary and Secondary Education Act and, unlike NCLB, ESSA has a primary focus on academically preparing students for careers and college. Several notable aspects of this law include (a) more support for expanding preschool programming, (b) requirements for all students to be taught at an academic standard that prepares them for success in careers and college, and (c) maintaining annual student learning assessment while reducing unnecessary and excessive testing protocols (Executive Office of the President, 2015). The foci on high academic rigor, teacher effectiveness, increasing technology in low SES classrooms, and making college affordable and equitable are salient features of this law noteworthy for P–12 career and college preparation.

Reach Higher

Reach Higher, an initiative sponsored by former first lady Michelle Obama, and in conjunction with the American School Counselor Association (ASCA), is an effort to get all students to commit to pursue some sort of postsecondary education. As part of President Obama's North Star goal 2020, a goal that the United States would be the leader in college graduates in the world again by 2020, Mrs. Obama challenged students, parents, and school counselors to work together within their communities to focus on completion and submission of Free Application for Federal Student Aid (FAFSA) forms, applications for scholarships, and applications to colleges across the country. Reach Higher is meant to prevent students from making foreclosed decisions about college, such as believing that college is unaffordable and therefore not an attainable option. The goal is to make students aware of the financial support available to them and to assist school counselors by providing them essential resources to help students make college choices. Reach Higher provides school counselors with strategies and materials such as the College Signing Day Toolkit, the College Signing Day pocket card, the College Scorecard, Net Price Calculator, College Navigator, and the Financial Aid Shopping Sheet (www.whitehouse.gov/reach-higher).

National Math and Science Initiative

According to the NMSI (as reported in Fleisher, 2012), the United States is falling behind in science, technology, engineering, and math (STEM), a potential threat to our global standing. Based on data reported by NMSI, in a ranking of 31 countries by the Organization for Economic Cooperation and Development, students in the United States rank 15th in reading, 19th in math, and 14th in science. Furthermore, when it comes to science, only 29% of fourth graders in the United States are proficient; and even more astounding, only 18% of 12th graders are at or above the proficient level in science (NMSI, 2011). Major corporate sponsorship for this initiative comes from Exxon, the Bill and Melinda Gates Foundation, and the Michael and Susan Dell Foundation. With so many potential career opportunities available, what makes STEM careers so critical? Who currently excels in STEM and how can we expand success to multiple populations?

STEM Careers, Women, and Minorities

Projections for STEM careers continue to show a great deal of growth and high demand for workers in these areas. This is no surprise given that the efforts in fields such as aeronautical engineering have made space travel and research possible, and have expanded our understanding of the complexities of our universe. Advancements in the frontier of sustainability engineering and the use of renewable energy sources (e.g., wind and solar power) hold promise for the health and integrity of our planet and the long-term needs of our growing population. Progress in the medical field in the treatment of illness and in understanding how the human body functions at a microscopic level have increased longevity and quality of life for millions of people.

The need for expertise in STEM areas is apparent, and long-term projections continue to show job growth in these areas and the need for a workforce to occupy these positions, in spite of economic recession and a loss of jobs in most sectors. For example, from July 2010 to July 2011, 299,000 jobs were added in the health care industry and 246,000 were added to professional and technical service industries such as computer systems design, bookkeeping, and payroll services (NCES, 2011b). That same period saw drops or no growth in the areas of government employment, leisure, and hospitality. Moreover, recent data show that health and technical careers are the highest paid professions for individuals with bachelor's degrees (NCES, 2011b). Yet, are students entering these professions?

According to the NCES (2011b), 16.1% of 2008–2009 graduates majored in STEM areas. However, a demographic breakdown of this number proves concerning. In particular, 25.5% of college males, but only 9.7% of college females, majored in STEM areas. Differences in race were also present among STEM majors: 31.4% of Asian students enter STEM majors, as do 16% of White students, 14.9% of Black students, and 12.3% of Hispanic students.

Many initiatives have been proposed to promote student interest and development in STEM areas, including the Race to the Top Fund where STEM is a priority in P–12 education, National Lab Day, and a plethora of grants for teachers, counselors, and others to provide STEM opportunities for P–12 students. Moreover, corporate sponsorship of federal initiatives for STEM has grown to include prestigious donors such as the Bill and Melinda Gates Foundation, the Carnegie Corporation, Time Warner Cable, Discovery Communications, and The MacArthur Foundation. In this book, we look at ways to engage P–12 students in STEM education.

AN ECOSYSTEMS APPROACH TO P–12 CAREER AND COLLEGE READINESS

Ecological and systems theories have become more prominent in recent years as both school-based professionals and researchers in many fields have begun to place greater appreciation on the role of family and community in the lives of P–12 students. In fact, school–family–community partnerships are frequently discussed in relation to addressing academic and behavioral concerns. We believe that three particular theories—Bronfenbrenner's *Bioecological Theory*, Young's *Career Concepts*, and Bordieu's *Social Capital Theory*—provide a strong foundation for conceptualizing when and how school counselors might involve a variety of stakeholders in their efforts to address career and college readiness.

Bronfenbrenner's Bioecological Theory

Urie Bronfenbrenner's Bioecological Theory (1977) is helpful in understanding the importance of students' environments on their preparation for careers and college. In his theory, Bronfenbrenner indicates that a child's own biology is the most important "environment" that affects his or her development.

Then, layers of environments (such as family, community, school, and society) interact to shape a child's development. These interactions become more complex as children develop increased cognitive abilities. As such, Bronfenbrenner supports the importance of choosing and implementing interventions that take into consideration a child's developmental level and involve individuals with whom the child interacts.

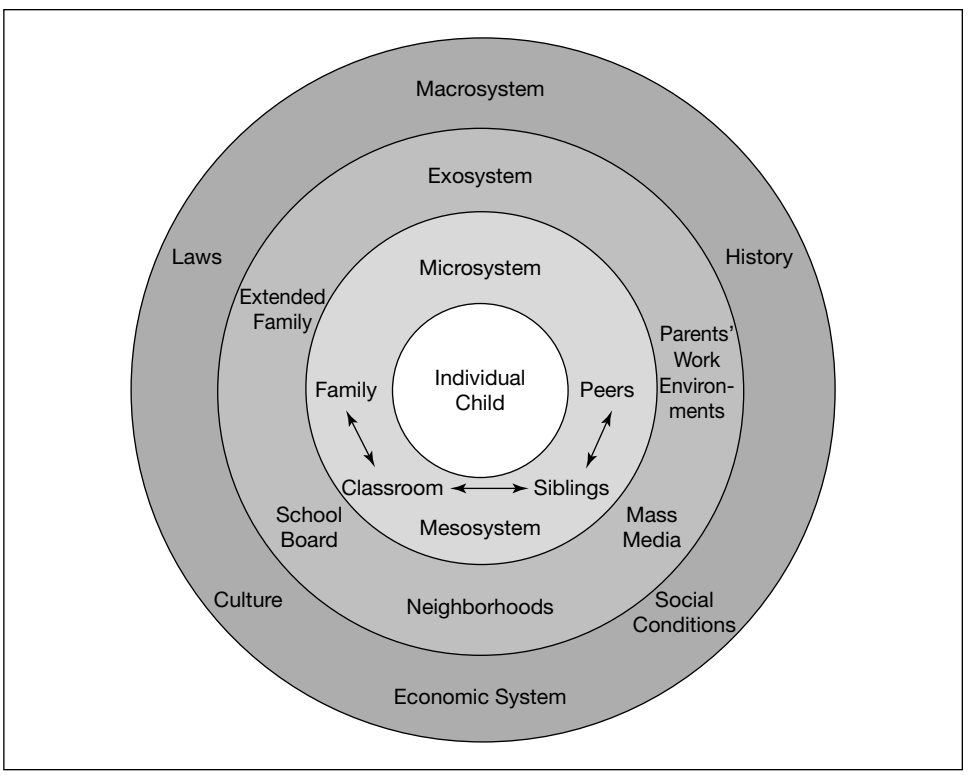
In describing the various environments that shape development, Bronfenbrenner defined multiple contexts including microsystems, mesosystems, exosystems, macrosystems, and chronosystems. *Microsystems* are the small environmental systems that exist in a child's immediate surroundings. Microsystems typically include a child's family, school, and neighborhood; the relationships that exist within microsystems are bidirectional, which is sometimes called reciprocity. For example, parental beliefs and actions are believed to affect those of the child, and vice versa. Bronfenbrenner indicates that the relationships that exist within microsystems are the most influential to a child. As such, we have chosen to devote a good amount of space in this text discussing the individuals who typically exist in a child's microsystems (e.g., parents, teachers, counselors, community members) and the roles they can and do play in shaping career and college readiness development.

The remaining environmental layers described by Bronfenbrenner are important in relation to their indirect influence on children. *Mesosystems* are the interactions that occur between microsystems (e.g., communication between home and school); for example, the interaction between family members and school staff at a parent–teacher conference. *Exosystems* are the structures that interact with microsystems (e.g., resources available in a school, policies made by the school board). The *macrosystem* comprises the cultural beliefs and values held by a society. According to Bronfenbrenner, the macrosystem directly affects the exosystem, which directly affects the mesosystem. For example, societal values (macrosystem level) that reinforce the idea that only schools are responsible for preparing students for careers and college may result in community microsystems feeling little obligation to offer career- or college-related services or resources (exosystem level). Because the community has no resources or services, they would have no relevant structures in place and therefore no need to interact (mesosystem level) with the school. In a system like this, one might expect parents, teachers, and students to receive inadequate information or insufficient training related to careers and college. School counselors may need to examine macrosystem level factors to understand how and why interactions at lower environmental levels occur as they do.

It could be argued that a mesosystem in which frequent communication and collaboration occurs among microsystems might be more desirable in relation to fostering career and college readiness than would a mesosystem in which there are few interactions (Milsom, 2007). With greater communication comes greater understanding of expectations. Career and college transitions can create challenges as new microsystems come into play. Diamond, Spiegel-McGill, and Hanrahan (1988) discussed Bronfenbrenner's theory specifically in relation to transitions for students receiving special education services. They indicated that

"the transition process can be seen as one of expanding the child's immediate environments, which in turn results in a greater number of environments which must relate to each other within the mesosystem" (pp. 245–246). Students transitioning to careers and college in essence eventually lose a familiar microsystem (e.g., public school system) and replace it with an unfamiliar one (e.g., college or employment setting). Milsom (2007) suggested that the more familiar a student becomes with an anticipated future microsystem, the more opportunities there are to develop the requisite knowledge, skills, and attitudes for success in that microsystem. It is likely that some skills and knowledge areas required for a successful transition to careers or college may be unfamiliar to many students. In line with Bronfenbrenner's theory is the idea that students who have high school experiences that are similar to their anticipated careers and college experiences should be fairly successful in their transition. An awareness of skill, knowledge, behavioral, and attitudinal components related to success in careers and college is critical for high school personnel in assessing student strengths and weaknesses in those areas. By planning ahead and allowing adequate time for students to develop new skills, school counselors and other stakeholders can help to "minimize the stress involved for children and their families and . . . maximize the chances of the child being successful in the new environment" (Kemp & Carter, 2000, p. 393). The development and maintenance of a collaborative mesosystem (to include communication with future microsystems) is in alignment with current thinking about school, family, and community partnerships. Figure 1.5 depicts the concentric circle of ecosystems.

FIGURE 1.5 Ecosystems



Young's Career Concepts

Young (1983) contended that while many career theories address developmental aspects of the individual, most fail to address the environmental contexts in which individuals live that influence career development. Using Bronfenbrenner's (1977) model, Young (1983) provided a framework for career and college readiness counseling at each ecosystemic level that could help school counselors conceptualize a systems approach to intervention. For example, Young noted that at the microsystem level both family and school have a large impact on the individual. He highlighted five familial characteristics that interchangeably influence career development: (a) birth order, (b) early parent–child interaction, (c) the child's identification with parents, (d) the amount of contact the child has with parents, and (e) the child's perception of parent(s) influence. We address each of these influences in subsequent chapters.

As previously mentioned, the school is also a microsystem that can hold great influence on career development, and Young (1983) explained that the school can exert two types of influence, *explicit* and *implicit*. The explicit influences at the school microsystems level include things that are directly done with the purpose of promoting career and college readiness, such as individual and small group counseling, career and college curriculum, and grade-level or school-wide activities. The implicit influences at the school microsystems level include things that are indirect influences on student career and college readiness, such as integration of careers and college in the educational curriculum, socialization experiences, access to extracurricular opportunities, and diversified course offerings that allow students to explore interests.

Other microsystem influences include peers and social support networks and, for many adolescents, workplace microsystems for seasonal and part-time employees. The positive developmental influences of part-time work on adolescents, according to Young (1983), include increased autonomy, realistic understanding of adult workplace expectations, and overall career knowledge. Negative career developmental influences of the workplace included decreased involvement with school, family, and peers (such as reduced participation in extracurricular activities like clubs and sports) and a focus in the workplace on task skills rather than higher order thinking skills. For example, for an adolescent working in a fast-food restaurant, he or she may be trained to make fries and hamburgers but never understand the concepts of marketing (i.e., branding), the economic development of the fast-food industry, and the reasons for safety requirements and industry regulation.

Young (1983) believed that multiple mesosystems influence students' career development: school-to-work transition, school-to-school transition, and family and school interactions. These interactions can become very complex and may involve more than one mesosystem. For instance, in the transition from middle to high school, the family may be interacting both with the middle school teachers, counselors, and administrators and the same personnel at the high school level. However, beyond these major mesosystem interactions, many small-scale mesosystem interactions impact career development, including career shadowing, field observations, field trips, and

cross-age programming (e.g., older students providing mentoring or tutoring for younger students).

Exosystemic influences on career development appear to be prominent for many students. According to Young (1983), the exosystem influences include the social support network and employment of parents (especially maternal employment), family socioeconomic status, public policy, and social media. All of these systems can have positive and negative outcomes for the developing individual. For example, state policy requiring career and college readiness information may be very helpful for students. However, financial constraints and budget cuts may make some career and college readiness programs vulnerable with the potential for being cut. Likewise, social media that promotes minorities and females in nontraditional roles (such as STEM careers) may promote career development (Choate & Curry, 2009). However, media that sexually objectifies women or stereotypes minorities may undermine career development. Another exosystem influence, according to Young (1983), is the impact child labor laws have on the amount and type of work exposure adolescents can have. Similarly, federal initiatives, such as those explored earlier in this chapter, are exosystem interventions based on cultural expectations of the importance of STEM careers and postsecondary success for students.

At the macrosystem level, work is an important aspect of each individual's unique identity in modern U.S. culture. According to Young (1983), the cultural aspects of education include social consensus on the purpose of education, work ethic, and job entitlement (in particular, a decreasing work ethic coupled with an increasing expectation that jobs will be available), technological changes, and cultural changes in the belief that a person has one career for a lifetime. In 1983, Young projected that many of the cultural career expectations of the current generation of students who are growing up in a fairly financially stable environment may be drastically altered with the advent of large-scale economic decline both in the United States and in global economies. Because we are currently living in an era of economic concern (10% unemployment), it is presumable that cultural shifts in career expectations regarding work ethic, job entitlement, and life-span career transitions and change will occur.

Bordieu's Social Capital Theory

Bourdieu's Social Capital Theory (1986) essentially notes the importance of the resources available to individuals within their social structures, both informally (i.e., relationships with family members) and formally (e.g., parent's work or a student's school). Through relationships developed within their social structures, students and their families form networks in which resources can be accrued that are both tangible (such as getting a job) and intangible (such as acquiring enrichment-based knowledge). Social capital may be inherited through connections by birth. Individuals who inherit capital expend less time and energy seeking to gain capital, as they have the opportunity to take advantage of networks of support and resources that already exist in their immediate systems. A few examples of students who might have more social

capital would be members of a royal family, children born to wealthy parents, or children born into families with middle class, professional, and educated parents. The other way that social capital may be acquired is through supportive interactions with individuals who will share their resources and capital through investing energy and assets in an individual with lower social capital.

We can illustrate social capital by providing a comparison. John and Lydia are both 5 years old. Lydia is a single child who loves art. Her parents bought her an easel when she was 3 and she has finger paints, paper, crayons, and PlayDoh at home. Lydia enjoys sculpting, painting, and coloring. Her parents have a membership at the local art museum and they take Lydia there about once per month. In contrast, John lives with his grandmother and four siblings. His grandmother has difficulty making ends meet and does not have money for extra toys or supplies in the home. John and Lydia both end up in the same first-grade class. It turns out that they both love to draw and both are quite artistic. Lydia's parents send her to a Saturday morning art class where she learns to paint on canvas. At school, both Lydia and John show promising signs of talent in the area of art and both are sent for screening for a talented program. Both qualify. Moving forward, both will have access to teachers and programs that will enhance their art performance; however, Lydia will still have the advantage of having parents who can afford art supplies, art camps, and enrichment activities that allow Lydia to explore her art interests. John may also build more capital around his art talent through a growing network of support from teachers, but he will also have to compensate for not having informal networks that can promote his art talent and interests through expending energy of his own to find mentors and access opportunities.

HISTORICAL DEVELOPMENTS IN CAREER THEORY RELATED TO CHILDREN AND ADOLESCENTS

Numerous career development theories exist that guide the work of counseling professionals. However, we believe that school counselors can benefit most from a few specific theories for which practical application for children and adolescents is well documented. We have chosen in this text to highlight a number of individuals whose work provides a strong foundation for school-based career and college readiness interventions, and in the chapters that follow we introduce their theories and articulate how their work relates to students in grades P–12. In this introductory chapter, however, we focus on five key career theorists: Frank Parsons, John Holland, Donald Super, Linda Gottfredson, and John Krumboltz.

Frank Parsons

It is commonly accepted that Parsons (1909), author of *Choosing a Vocation*, is one of the most influential individuals in relation to career development. In his model, Parsons emphasized the importance of self-awareness, occupational awareness, and making logical occupational choices. He believed that people

could be matched with occupations if they knew enough about themselves and about work requirements to determine if they would be a good fit for a particular occupation. His ideas served as the precursor to the trait and factor career theories that are so prominently used today in career counseling.

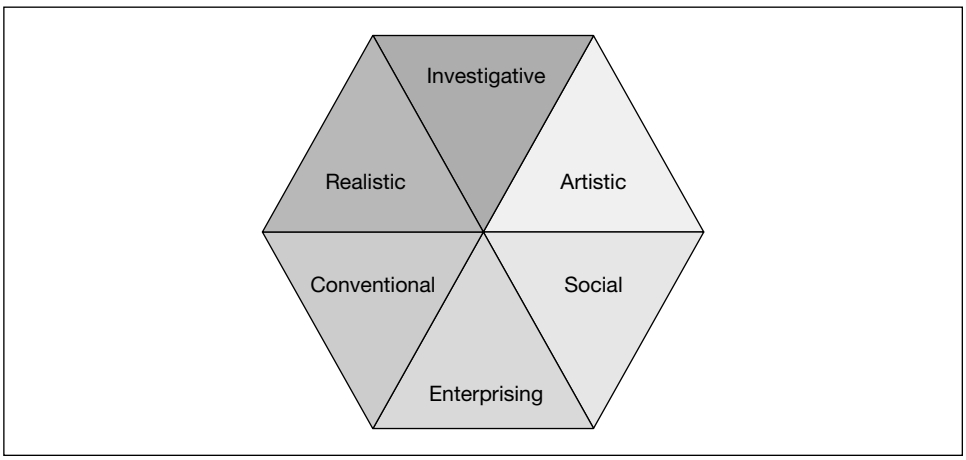
John Holland

Trait and factor theories emphasize finding a match between an individual's personality and a work environment. Holland (1973) developed the *Theory of Vocational Choice*, one of the most practical and commonly applied career theories. He, like Parsons, believed that job success and job satisfaction result from a strong person–environment match. Of prominence in Holland's theory is what he describes as an individual's personality. He believes that a career personality emerges as a result of the interaction of inherent characteristics and the activities to which someone is exposed. The resulting personality is reflected in a person's interests, abilities, and values.

Holland developed a classification system, based on personality types, through which he is able to categorize people and occupations. In his theory, Holland postulates that in order to be successful and satisfied, an individual needs to choose an occupation that is congruent with his or her personality. The six personality types are Realistic, Investigative, Artistic, Social, Enterprising, and Conventional. Holland displays these codes on a hexagon (Figure 1.6).

Realistic personalities interact with the environment by focusing on concrete and physical activities through which they can manipulate objects, tools, and machines. In contrast, *investigative* personalities interact with the environment by using their intellect. They prefer working with concepts and words. *Artistic* personalities interact with the environment through creativity, preferring to engage in activities like art, drama, and others that allow them to express themselves creatively. People who fall into the *social* personality type prefer to interact with the environment through use of their interpersonal skills. They like engaging in activities that allow them to interact with others.

FIGURE 1.6 Holland Codes



Enterprising personalities interact with the environment typically through activities that allow them to exhibit dominance and power over others and to experience recognition for their efforts. Finally, people who fall into a *conventional* personality type prefer activities for which they will receive approval from others. Their behaviors are expected and routine.

Through the identification of a Holland Code, the classification system captures the nuances that exist within people and occupations. The three-letter Holland Code (e.g., SAI) reflects the most prominent personality types exhibited by an individual or occupation. The first letter represents the most influential characteristics in describing an individual's career decisions; the second letter is the next most influential, and the third letter the third most influential. Holland indicates that the clarity of a person's identity is reflected in how well his or her personality code is differentiated and if the code is consistent. A personality code is well differentiated when the scores for the main personality types (i.e., Holland Code) are much higher than those for the remaining personality types. A consistent personality code is one that includes personality types that are adjacent on the hexagon (see Figure 1.6).

Assessment plays an important role in Holland's theory and the concrete application of his theory is likely what makes it so appealing to counselors. Holland's Self-Directed Search (SDS; see Chapter 5), an instrument that can be used to identify an individual's Holland Code, contains items that examine interests, abilities, and values. The self-report instrument has been validated for use with adolescents and adults. In Holland's Occupations Finder, occupations are categorized by Holland Code. Once individuals identify their Holland Code through the SDS, they can search the Occupations Finder to identify congruent occupations.

Donald Super

While trait and factor theories focus on identifying characteristics related to the fit between people and occupations, developmental theories focus on understanding career development across the life span. Super's (1953) *Life-Span, Life-Space Theory* is the most well-known developmental career theory. He explains that career choice results from a developmental process rather than from a onetime decision. He also believes that people may be happy engaging in more than one occupation. In his theory, Super outlined five developmental stages (growth, exploration, establishment, maintenance, and disengagement) and explains that different career tasks occur throughout those stages. He also emphasized the importance of various life roles (e.g., child, worker, parent) on career development. Of most importance in Super's theory is self-concept, which consists of a person's view of himself or herself and the person's life situation. Super believes that career choices result from a person attempting to find work that fits his or her self-concept. As life roles change over time, naturally a person's self-concept will change, and therefore occupational preferences and choices may change over time.

Linda Gottfredson

In her *Theory of Circumscription and Compromise*, Gottfredson (1981) explains how career aspirations develop over time, beginning in childhood. Similar to its role in Super's theory, self-concept plays a prominent role in Gottfredson's theory; she indicates that people usually choose occupations that are consistent with their self-concept. According to Gottfredson, self-concept consists of a social self (e.g., perceptions of sex, ability, and social status) and psychological self (e.g., values).

Gottfredson described a four-stage model of career development. The first stage, *Orientation to Size and Power*, typically occurs from ages 3 to 5. During this stage, children develop the ability to picture themselves in adult roles. Their self-concept begins to develop but is limited to dichotomous views of self. During the second stage, *Orientation to Sex Roles*, children between the ages of 6 and 8 start to expand their knowledge of careers beyond those they see in their immediate family. They tend to become aware of careers to which they have frequently been exposed. Furthermore, during this stage children start to categorize people based on salient characteristics including sex and race, and these characteristics become prominent in their own self-concept; in particular, sex typing becomes highly influential. In this sense, sex refers to the biological differences between males and females, whereas gender refers to the social or cultural differences between male and female identity. Both gender and sex matter to children in stage two. Stage three, *Orientation to Social Valuation*, typically occurs in the middle school years (ages 9–13). During stage three, children and young adolescents become aware of the existence of different socioeconomic levels and indicators of social status. They also develop an awareness of the connection between high-status jobs and increased educational requirements. Furthermore, they become keenly aware of their own academic abilities and social status, integrating those into their self-concept. The final stage, *Orientation to Internal, Unique Self*, is when adolescents are able to articulate their idealistic and realistic career aspirations.

A few key terms are critical to understanding Gottfredson's (1981) theory. *Circumscription* is the process of narrowing down or ruling out occupations. According to Gottfredson, individuals circumscribe occupations based on perceptions of their social self and perceptions of the accessibility of those occupations. During stages two, three, and four, occupations are ruled out when individuals do not perceive them to be consistent with their own sex, social status, or interests and abilities. Gottfredson describes the resulting list of occupations as the *Zone of Acceptable Alternatives*. She believes that once an occupation is circumscribed, reversing the process can be challenging but not impossible. A second important term, *compromise*, is when individuals give up occupations that are compatible for ones that are most accessible. According to Gottfredson, as people compromise they first consider their perceptions of sex type, then prestige, and finally interests.

John Krumboltz

According to Krumboltz (2009), *Happenstance Learning Theory* is applicable to career and college readiness in a number of noteworthy ways. Basic tenets include that learning is constant and may occur from experiences that are positively or negatively consequential. Similarly, career and college aspirations may be influenced by prior learning that has led to positive or negative feedback for the individual. Similarly, associated learning may occur by vicarious experience or through observing the experiences of others. Associative learning may happen through social media, television, or through the direct environment, and interactions with parents, teachers, and peers. Settings may have negative or positive effects on learning.

For example, P–12 schools, which should offer support for positive learning, often set students up for a series of disappointments by not adequately or effectively addressing social injustices, economic hardships, bullying, and learning disabilities (Krumboltz, 2009). However, unplanned events are a natural and necessary part of career development. Indeed, in direct opposition to Social Capital Theory, in which assets and structures help individuals, Happenstance Learning Theory asserts that unplanned events are also helpful and necessary. Krumboltz offered several fundamental suggestions for career counseling:

1. The goal of career counseling is to help clients learn to take actions to achieve more satisfying career and personal lives—not to make a single career decision. (p. 141)
2. Career assessments are used to stimulate learning, not to match personal characteristics with occupational characteristics. (p. 143)
3. Clients learn to engage in exploratory actions as a way of generating beneficial unplanned events. (p. 144)
4. The success of counseling is assessed by what the client accomplishes in the real world outside the counseling session. (p. 145)

Consider suggestion number 3. Jamilia had never considered being a girl scout, but all her friends begged her to do so. She didn't really know much about the organization other than they sold cookies, and she definitely didn't like the outfits they wore. She wanted to spend time with her friends, however, so she asked her parents and they allowed her to join. Through membership in the organization, Jamilia was exposed to so many things—she learned about sales and first aid and science and writing. Her only career aspiration up until that point was to be a dancer, but after participating in some of the science and nature activities, she started to reconsider. She found that she really liked figuring things out, and it turns out she was good at science—something she had never realized from school. Seeing Jamilia's interest, one of her scout leaders told her about a science camp for girls that she thought Jamilia might enjoy, and with her help, Jamilia's parents were able to secure a scholarship for her to attend. At that camp, she made connections to a staff member who later would

play a critical role in her getting a college scholarship. Had Jamilia's friends not begged her to join them, her parents not permitted her to do so, and her scout leader not suggested the camp, it is possible that Jamilia never would have developed a love for science or found a way to college. This is just one example of how unplanned events can positively impact future outcomes.

CAREER AND COLLEGE READINESS SKILLS

The career theories we just reviewed emphasize the importance of self-awareness (knowing one's interests, aptitudes, values, and beliefs) and career awareness (knowing specific occupational training and skill requirements) so that meaningful career goals can be identified and pursued. Knowledge of the skills needed for success in careers and college in general also can be important in helping students identify strengths and weaknesses and in helping counselors and other educators identify areas for intervention. As we discussed previously, 21st-century students need multiple skills to be successful in careers and college. We talked about academic, employability, and technical skills, as well as important intrapersonal factors and dispositions. We want to look now at a few specific skills that all students, no matter what their career path, need to possess. These skills fall into six major categories: career exploration, social interaction and communication, higher order thinking, financial literacy, self-regulation, and employability.

Career Exploration Skills

As students enter the 21st-century workforce, it is most likely that their career paths will change multiple times. Students need to have the skills to explore various occupations, including having an understanding of how their own aptitudes, interests, and values impact overall career satisfaction and career decision making. Moreover, they also need to know how to comprehensively engage in career exploration tasks to access accurate information regarding the training required to enter an occupation, what a typical day on the job is like, what additional skill sets are required, what specialty areas exist within an occupation, average earnings/wages, and the projected outlook for the growth or decline of an occupation. To be able to find this information, students need to be provided opportunities to engage in activities such as completing career assessments, reviewing technical websites, engaging in job shadowing, and understanding interview protocols. Career exploration skills are more salient than ever as students are often exposed, via social media, to unrealistic careers. For example, many students may like the idea of entering the area of forensics as a result of watching crime scene investigation shows; however, careers are often inaccurately portrayed in such Hollywood creations. Being able to accurately explore a career allows students to develop a realistic view of the day-to-day realities of a particular occupation.

Social Interaction and Communication Skills

In addition to knowing how to explore a career, students need to have the skills to be successful in the workplace. There are myriad social and communication skills necessary for career success. Being able to work collaboratively with others as well as function autonomously are vital. Other skills include active listening; communicating effectively in writing, verbally, and electronically; compromising; managing conflict; and interacting effectively with a group (Sharf, 2006). Students also need to have self-awareness of their own values, cultural heritage, beliefs, and biases and how these may affect their interactions with others; most importantly, they need to have a true appreciation for diversity and a propensity for cultural sensitivity and positive affirmation of others (ASCA, 2012; Holcomb-McCoy & Chen-Hayes, 2011).

Higher Order Thinking Skills

As suggested by Brock (2010) in his discussion of college readiness, students in the most basic sense need to possess cognitive skills that will enable them to retain and apply knowledge. We suggest that a continuum of cognitive skills would be important to assess when working on career and college readiness. At the most basic level, students need to possess the cognitive skills that would enable them to do things like focus their attention, concentrate on a task, and comprehend instructions. At a middle level, critical thinking skills would be required—the ability to identify problems and generate solutions. Finally, for students pursuing 4-year college degrees, higher order thinking skills would be necessary to enable them to successfully engage in tasks like solving complex algebraic equations, writing fluent essays, and understanding scientific research methodology.

Financial Literacy Skills

Financial literacy may be defined as "possessing the skills and knowledge on financial matters to confidently take effective action that best fulfills an individual's personal, family and global community goals" (National Financial Educators Council, n.d.). For P–12 students, financial literacy skills related to postsecondary life include things such as learning how to create and manage a budget based on projected income and lifestyle, saving for college, and managing debt (e.g., credit cards, student loans). Related to budgets, all P–12 students can benefit from learning about financial matters that would relate to living on their own and supporting or contributing to a family. Understanding things like basic budgeting, mortgage rates, compound interest, and car loans can help them determine what they can and cannot afford based on their income. Learning how to manage debt also is important for all students, but particularly for students who need to take out loans to pay for their postsecondary education.

An estimated 66% of first-time bachelor's degree recipients borrowed to finance their education, with their average debt equaling $24,700 (NCES, 2011a). Skills to navigate the financial aid system (e.g., filling out an FAFSA; exploring loan, scholarship, and other funding sources) can help students and their families develop a more realistic understanding of whether or not postsecondary school is possible. At least 13 states have scholarship programs that cover tuition and other costs for eligible students (Brandon, 2006). For example, Georgia's HOPE (Helping Outstanding Students Educationally) scholarship requires a high school grade point average of 3.0 in a college preparatory curriculum; it covers 100% of tuition and provides $300 for books (Brandon, 2006). Students and their families ideally must understand the requirements for these types of scholarships by middle school so that they can make appropriate high school curricular choices. Furthermore, in order to determine what might be realistic financially, students and families also need to understand what expenses (e.g., residence hall fees, institutional fees, transportation costs, extracurricular activities, materials needed such as notebooks and laptops) the scholarships do and do not cover.

Self-Regulatory Skills

Self-regulation (Bandura, 1977) refers to the ability to set goals and manage behavior toward those goals. Self-regulation requires approximating consequences, determining the action required to meet a desired outcome, and evaluating one's abilities to successfully complete a desired behavior and reach a goal (Bandura, 1977). Additionally, it includes directing oneself in day-to-day activities with discipline, and it is a particularly important skill for facing challenges and being able to problem solve, break goals down into manageable tasks, and focus on task completion. According to Bandura (1986), mastery of any given task requires the minimal skills necessary to perform the task *and* feelings of efficacy in one's ability to effectively apply skills. Thus, in order for students to achieve in school and move through postsecondary educational programs and careers with success, they must possess the skills to set and attain goals as well as the belief that they can achieve those goals.

Employability

Employability skills include those skills necessary to secure a position in one's chosen field. Skills such as developing a resume that accurately and effectively highlights one's achievements, writing a cover letter that distinguishes one from other job competitors, and confidently participating in an interview are all critical. Finding open positions in one's field and discerning the necessary qualifications for consideration of employment are also included in this skill set.

THE ROLES OF STAKEHOLDERS IN CAREER AND COLLEGE READINESS

Who is responsible for promoting career and college readiness? The obvious answer is the school counselor (ASCA, 2012); however, in today's educational environment, all educators are expected to play a role in assisting students to

become career and college ready. According to a policy brief in the *Alliance for Excellent Education* (Miller, 2009), teachers must be prepared to teach to higher standards than ever before. Rather than just focusing on content, they also need to assist students in connecting academic content to careers and college. Moreover, parents, administrators, and community partners all play a role in developing students' career and college awareness and potential. In this book, we highlight the role of the school counselor in career and college readiness while also looking at the counselor's role in fostering stakeholders' ability to promote career and college readiness. We also focus on adult stakeholders we believe to be most consistently and directly involved in students' lives: counselors, teachers, administrators, parents/guardians, and community partners.

Counselors

Counselors are positioned to promote student development in three specific areas: academic, career, and personal/social domains (ASCA, 2012). Through a comprehensive school counseling program, counselors design, implement, manage, and evaluate services to students and other stakeholders (i.e., parents, teachers, administrators, and community partners). In order to help all stakeholders understand the importance and purpose of a comprehensive career and college readiness approach in schools, it is important that school counselors involve these individuals in the coordination and development of the program (Niles & Harris-Bowlsbey, 2009). Moreover, career and college readiness programming should be consistently delivered, based on measurable goals and objectives, and evaluated. In this way, students receive quality services rather than piecemeal or sporadic interventions, and school counselors are able to monitor the effectiveness of their interventions (ASCA, 2012; Niles & Harris-Bowlsbey, 2009). School counselors provide students with career and college information, assessments, and skills. Further, they assist students in understanding the connections between academics and the world of work. School counselors are trained to deliver the following career and college interventions for students and stakeholders: classroom lessons, small-group interventions, individual counseling and advising sessions, school-wide and grade-level career- and college-related activities, faculty in-service programs, parent workshops, and community partner programs. Examples of all of these services are provided throughout this book.

Teachers

Teachers play a pivotal role in students' career and college readiness. Because students often question the need for academic knowledge (e.g., "Why do we have to learn algebra? I'm never going to use it!"), it can be helpful for teachers to introduce ways that academic content in the classroom relates to future career and college opportunities. Although career education has historically been the school counselor's role, many states are requiring teacher candidates to also demonstrate competency in developing student career

and college readiness (Curry, Belser, & Binns, 2013). For instance, the South Carolina Department of Education (2012), in order to align teacher preparation programs with the Education and Economic Development Act, states that, "educator preparation units must provide assessment evidence to indicate that all candidates enrolled in educator preparation, school guidance counseling, and education administration programs possess the knowledge, skills, and dispositions" (p. 4) to integrate career-related content into the P–12 curriculum. However, many teachers may view the integration of careers and college in the classroom curriculum as extra work. Therefore, it is important that teachers are provided with strategies that are manageable and that engage students. In order to effectively do this, teachers need professional development opportunities to learn about technology and curriculum materials that can be used to integrate career and college information into classroom instruction (Curry et al., 2013). In this book, we explore how school counselors can provide teachers with such professional development and collaborate to provide career and college readiness interventions.

In addition, to proactively integrate career and college content into their classrooms, teachers should become aware of how their actions may encourage or discourage students from certain career and college options. They often are the first to identify students who possess aptitudes in certain areas or who have strong interests for certain subjects. With an appreciation for how their encouragement and support can make a difference in students' career and college aspirations, teachers can be intentional about how they work with students.

Administrators

Administrators play a major role in the types of programming that students receive. Effective principals and education leaders understand current policies and best practices, and know that career and college readiness is a critical component of P–12 education. Principals ensure that quality and rigor are maintained in the school's curriculum and work closely with the school counselor to promote the integration of career and college information in the school's education agenda. The principal works to foster collaboration among teachers, parents, students, and the school counselor to improve students' access to rigorous course offerings, college planning, academic advisement, and assessment resources. Further, the principal and school counselor coordinate efforts to ensure that a comprehensive school counseling program is in place and utilized by all stakeholders.

Parents and Guardians

Families play a pivotal role in a child's career and college readiness. Indeed multiple family factors are correlated with career and college decision making, including parents' education level (NCES, 2011a), parents' educational expectations and support for the child, family socioeconomic status, and financial

resources (Hossler, Schmit, & Vesper, 1999; Patton & Creed, 2007). Specifically, the higher the educational attainment of the parents, the more likely the child will earn a college degree. In a study of students attending college in the United States, 29.8% of students had a parent with a graduate or professional degree, 26.4% had a parent with a bachelor's degree, 23.7% had a parent with some postsecondary education, and 20.1% had a parent with high school education or less (NCES, 2011a). Because parents convey family values about education, it is important that they understand their role in promoting postsecondary educational options for their children.

Most notably, it is important that school counselors and educators not assume that parents without postsecondary degrees do not value such experiences for their child. However, those parents may need more help assisting their children in navigating admissions, financial aid, registration, and so on; therefore, the resources they receive to do this are vital. School counselors also can educate parents about the ways in which they can promote interest in school, foster the innate talents their children possess, and provide opportunities for their children to explore careers and colleges.

Community Partners

Community partners play an invaluable role in students' career and college readiness. They assist school counselors by providing insight on local workforce needs, providing student career mentorship, serving as career and college guest speakers, providing resources for career and college fairs, and facilitating job-shadowing opportunities. Throughout this book, we offer a variety of examples of how school counselors can engage community partners in career and college readiness initiatives.

HOW TO USE THIS BOOK TO PREPARE FOR P–12 CAREER AND COLLEGE READINESS PROGRAMMING IN SCHOOLS

Developmental Overview

In each chapter of this book, we present a holistic overview of the typical chronological ages present within the grade level under discussion. Children's social, physical, emotional, cognitive, and educational development are interrelated with and greatly influence career and college readiness (Gibson & Mitchell, 2006). Therefore, we begin each chapter with a review of the holistic developmental milestones and developmental tasks for the age group(s) presented in that chapter. However, as an important caution to readers, it is critical to note that development is personal and continues throughout the life span, so the information presented in these chapters is general in nature and may not apply to each individual child. Indeed, development varies among children as rates of growth and personal factors (i.e., temperament, intelligence, support systems) are unique to each individual.

Sequential Career and College Readiness Programming

In this book, we use a sequential format. By this we mean that with each grade level we cover, we show the reader how student competence builds on prior learning in the areas of career knowledge and skills. For example, when learning math, a student is introduced to addition before multiplication. The same is true for careers and college content; each subsequent grade level will build on prior knowledge and skills.

Pedagogy, Learning Objectives, and Curriculum Development

School counselors need to be able to develop a career and college readiness curriculum to meet the needs of the population at the school they serve (ASCA, 2012). However, many school counselors do not have a background in education. Therefore, in this book we use a two-part approach to help novice school counselors write their curriculum: (a) Bloom's Taxonomy, and (b) the *ASCA Mindsets and Behaviors for Student Success: K-12 College- and Career-Readiness Standards for Every Student* (2014; see Appendix C). In counseling and education, pedagogy that paces higher cognitive development is often based on Bloom's Taxonomy. The taxonomy (see Chapter 6) denotes how learning begins with lower-level thinking (memorization, recognition, recall) and moves to more complex, higher order thinking (proposing and using an evaluative criteria). All learning can be paced to higher order thinking.

The ASCA Mindsets and Behaviors (2014) are used to assist school counselors in identifying developmentally appropriate student learning objectives and conceptualizing associated career and college readiness interventions. This book covers practical applications for school counselors to include whole-school programs, grade-level programs, classroom presentations, small-group counseling, individual career and college counseling, individual planning/academic advisement, parent workshops, and faculty in-service on career- and college-related topics.

Sample Activities and Case Studies

Throughout this book, we share examples of career and college readiness interventions that are empirically supported, grounded in theory, and/or already successfully implemented in schools. Our examples reflect counselors' direct work with students (e.g., classroom and individual interventions) as well as their work for the benefit of or in collaboration with parents, teachers, and community partners. Many of the examples are suggested for a specific grade level or type of student, but could easily be adjusted for use with other populations. Further, given the cultural differences and variations possible within any school population, it is important that readers consider culturally sensitive career and college readiness practices (see Chapter 4).

SUMMARY

In this chapter, we defined career and college readiness and the role of the school counselor in helping students develop relevant skills and knowledge. We reviewed federal initiatives that are impacting career and college readiness for students, particularly in the STEM areas, and looked at current trends in postsecondary enrollment and matriculation as well as in employment. We then discussed the type of skills students will need to be successful for college and the world of work and the importance of all stakeholders in promoting students' understanding of careers and college. In the following chapters, we examine career and college readiness by education levels for students in P–12 schools.

Test Your Knowledge

1. Explain how federal initiatives have impacted career and college readiness.
2. Based on the data and statistics shared in the beginning of this chapter, identify one or two specific populations you believe should be targeted in an effort to help close the achievement gap.
3. Compare and contrast the skills needed for career readiness with those needed for college readiness.

REFERENCES

ACT, Inc. (2008). *The forgotten middle: Ensuring that all students are on target for college and career readiness before high school (Policy brief).* Iowa City, IA: Author.

ACT, Inc. (2015). *The condition of college & career readiness 2015.* Iowa City, IA: Author. Retrieved from http://www.act.org/content/act/en/research/condition-of-college-and-career-readiness-report-2015.html?page=0&chapter=0

Akos, P., Niles, S. G., Miller, E. M., & Erford, B. T. (2011). Promoting educational and career planning in schools. In B. T. Erford (Ed.), *Transforming the school counseling profession* (3rd ed., pp. 202–221). Upper Saddle River, NJ: Pearson.

American Association of University Women. (2016). *The simple truth about the gender pay gap.* Washington, DC: Author.

American School Counselor Association. (2012). *The ASCA national model: A framework for school counseling programs* (3rd ed.). Alexandria, VA: Author.

American School Counselor Association. (2014). *ASCA mindsets & behaviors for student success: K-12 college- and career-readiness standards for every student.* Alexandria, VA: Author.

Association for Career and Technical Education. (2010). *What is career ready?* Alexandria, VA: Author.

Association for Career and Technical Education. (2011). *What is "career ready?"* Retrieved from https://www.acteonline.org/search.aspx?q=what is "career ready"?

Bandura, A. (1977). *Social learning theory.* Englewood Cliffs, NJ: Prentice Hall.

Bandura, A. (1986). *Social foundations of thought and action: A social cognitive theory.* Englewood Cliffs, NJ: Prentice Hall.

Blumenstyk, G. (2015). *American higher education in crisis? What everyone needs to know.* New York, NY: Oxford University Press.

Bourdieu, P. (1986). The forms of capital. In J. G. Richardson (Ed.), *Handbook of theory and research for the sociology of education* (pp. 241–258). Westport, CT: Greenwood Press.

Brandon, E. (2006, September 18). Better yet, no tuition. *U. S. News & World Report*, *141*(10), 74–75. Retrieved from http://www.cbsnews.com/news/better-yet-no-tuition

Brock, T. (2010). Young adults and higher education: Barriers and breakthroughs to success. *Future of Children, 20*(1), 109–132.

Bronfenbrenner, U. (1977). Toward an experimental ecology of human development. *American Psychologist, 32*, 513–531. http://dx.doi.org/10.1037/0003-066X.32.7.513

Carnevale, A. P., Rose, S. J., & Cheah, B. (2011). *The college payoff: Education, occupations, lifetime earnings.* Retrieved from http://cew.georgetown.edu/collegepayoff

Carnevale, A. P., Smith, N., & Strohl, J. (2010). *Help wanted: Projections of jobs and education requirements through 2018.* Retrieved from http://cew.georgetown.edu/jobs2018

Choate, L. H., & Curry, J. (2009). Addressing the sexualization of girls through comprehensive programs, advocacy and systemic change: Implications for professional school counselors. *Professional School Counseling, 12*(3), 213–221. http://dx.doi.org/10.5330/PSC.n.2010-12.213

Conley, D. T. (2007). *Redefining college readiness.* Eugene, OR: Educational Policy Improvement Center.

Curry, J., Belser, C. T., & Binns, I. C. (2013). Integrating post-secondary college and career options in the middle school curriculum: Considerations for teachers. *Middle School Journal, 44*(3), 26–32.

Curry, J., & Bickmore, D. (2012). School counselor induction and the importance of mattering. *Professional School Counseling, 15*(3), 110–122. http://dx.doi.org/10.5330/PSC.n.2012-15.110

Diamond, K. E., Spiegel-McGill, P., & Hanrahan, P. (1988). Planning for school transition: An ecological-developmental approach. *Journal of the Division for Early Childhood, 12,* 245–252.

Executive Office of the President. (December, 2015). *Every student succeeds act: A progress report on elementary and secondary education.* Executive Summary. Retrieved from https://www.whitehouse.gov/sites/whitehouse.gov/files/documents/ESSA_Progress_Report.pdf

Fleisher, G. (2012). *Addressing America's STEM crisis: Taking proven programs to national scale*. Dallas, TX: National Math and Science Initiative. Retrieved from https://www.eplc.org/notebook2012/GreggFleisher_May17.pdf

Gibson, R. L., & Mitchell, M. H. (2006). *Introduction to career counseling for the 21st century.* Upper Saddle River, NJ: Pearson.

Gottfredson, L. S. (1981). Circumscription and compromise: A developmental theory of occupational aspirations. *Journal of Counseling Psychology, 28*(6), 545–579. http://dx.doi.org/10.1037/0022-0167.28.6.545

Hart Research Associates. (2005). Rising to the challenge: Are high school graduates prepared for college and work? A study of recent high school graduates, college instructors, and employers. Retrieved from http://www.achieve.org/files/pollreport_0.pdf

Holcomb-McCoy, C., & Chen-Hayes, S. F. (2011). Culturally competent school counselors: Affirming diversity by challenging oppression. In B. T. Erford (Ed.), *Transforming the school counseling profession* (3rd ed., pp. 90–109). Upper Saddle River, NJ: Pearson.

Holland, J. L. (1973). *Making vocational choices: A theory of careers.* Englewood Cliffs, NJ: Prentice Hall.

Hossler, D., Schmit, J., & Vesper, N. (1999). *Going to college: How social, economic and educational factors influence the decisions students make.* Baltimore, MD: The Johns Hopkins University Press.

Isay, D. (2016). *Callings: The purpose and passion of work* (a StoryCorps Book). New York, NY: Penguin Publishing.

Johnson, L. S. (2000). The relevance of school to career: A study in student awareness. *Journal of Career Development, 26*(4), 263–276. http://dx.doi.org/10.1177/089484530002600403

Kemp, C., & Carter, M. (2000). Demonstration of classroom survival skills in kindergarten: A five-year transition study of children with intellectual disabilities. *Educational Psychology, 20,* 393–411. http://dx.doi.org/10.1080/713663756

Krumboltz, J. D. (2009). The happenstance learning theory. *Journal of Career Assessment, 17*(2), 135–154. http://dx.doi.org/10.1177/1069072708328861

Martin, P. J., & Robinson, S. G. (2011). Transforming the school counseling profession. In B. T. Erford (Ed.), *Transforming the school counseling profession* (pp. 1–18). Upper Saddle River, NJ: Pearson.

Miller, M. (2009). *Teaching for a new world: Preparing high school educators to deliver college- and career-ready instruction.* Retrieved from ERIC database (ED507351).

Milsom, A. (2007). Interventions to assist students with disabilities through school transitions. *Professional School Counseling, 10*(3), 273–278.

Myers, J. E., Sweeney, T. J., & Witmer, J. M. (2000). The wheel of wellness counseling for wellness: A holistic model for treatment planning. *Journal of Counseling & Development, 78*(3), 251–266. http://dx.doi.org/10.1002/j.1556-6676.2000.tb01906.x

National Center for Education Statistics. (2011a). *2008–2009 baccalaureate and beyond longitudinal study (B&B:08/09).* Washington, DC: U.S. Department of Education.

National Center for Education Statistics. (2011b). *Digest of education statistics, 2010. (NCES 2011-015).* Washington, DC: U.S. Department of Education. Retrieved from http://nces.ed.gov/fastfacts/display.asp?id=59

National Center for Education Statistics. (2014). *Digest of education statistics. Table 501.50. Employment to population ratios of persons 16 to 64 years old, by age group and highest level of educational attainment: Selected years, 1975 through 2014.* Retrieved from https://nces.ed.gov/programs/digest/d14/tables/dt14_501.50.asp

National Center for Education Statistics. (2015). *Enrollment and percentage distribution of enrollment in public elementary and secondary schools, by race/ethnicity and region: Selected years, fall 1995 through fall 2025.* Washington, DC: U.S. Department of Education. Retrieved from http://nces.ed.gov/programs/digest/d15/tables/dt15_203.50.asp

National Financial Educators Council. (n.d.). Financial literacy definition. Retrieved from http://www.financialeducatorscouncil.org/financial-literacy-definition.html

Niles, S. G., & Harris-Bowlsbey, J. (2009). *Career development interventions in the 21st century* (3rd ed.). Upper Saddle River, NJ: Merrill.

Parsons, F. (1909). *Choosing a vocation.* Boston, MA: Houghton Mifflin.

Patton, W., & Creed, P. (2007). The relationship between career variables and occupational aspirations and expectations for Australian high school adolescents. *Journal of Career Development, 34*(2), 127–148. http://dx.doi.org/10.1177/0894845307307471

Pew Research Center. (2014, February 11). The rising cost of not going to college. Pew Research Center Social and Demographic Trends. Retrieved from http://www.pewsocialtrends.org/2014/02/11/the-rising-cost-of-not-going-to-college

Ryan, C. L., & Bauman, K. (2016, March). *Educational attainment in the United States: 2015. Population characteristics (*Report #P20-578). Washington, DC: U.S. Census Bureau.

Sharf, R. S. (2006). *Applying career development theory to counseling* (4th ed.). Belmont, CA: Thomson.

South Carolina Department of Education. (2012). Standards, policies, and procedures for South Carolina educator preparation units. Retrieved from http://ed.sc.gov/scdoe/assets/File/educators/educator-preparation/educator-units/081012Standards_Policies_Procedures_Board_Approved_2015(1).pdf

Super, D. E. (1953). A theory of vocational development. *American Psychologist, 8,* 185–190.

The Chronicle of Higher Education. (2011). *Almanac of higher education 2011.* Retrieved from http://chronicle.com/section/Almanac-of-Higher-Education/536

U.S. Bureau of Labor Statistics. (2015). *TED: The economics daily. Rising wage inequality 2003–13.* Washington, DC: U.S. Department of Labor. Retrieved from http://www.bls.gov/opub/ted/2015/rising-wage-inequality-2003-13.htm

U.S. Census Bureau. (2011). Educational attainment by race, Hispanic origin, and sex: 1970-2010. In *Statistical Abstract of the United States: 2012* (131st ed., Table 230, p. 151). Washington, DC: Author. Retrieved from https://www2.census.gov/library/publications/2011/compendia/statab/131ed/2012-statab.pdf

U.S. Census Bureau. (2014), *Income and poverty in the United States: 2014* (Table B 2, pp.54–56; Current Population Reports, P60-252)., Retrieved from http://www.npc.umich.edu/poverty/#5

U.S. Department of Education. (2004). *NCLB overview: Executive summary.* Archived information. Washington, DC: Author. Retrieved from http://www2.ed.gov/nclb/overview/intro/execsumm.html

Young, R. A. (1983). Career development of adolescents: An ecological perspective. *Journal of Youth and Adolescence, 12*(5), 401–417. http://dx.doi.org/10.1007/BF02088723

TWO

P–12 Career and College Readiness: Preparing All Students for a Postsecondary Plan

In this chapter, we discuss the factors involved in students' postsecondary decision making. In addition to 4-year college degrees, we give attention to career-bound students pursuing industry recognized credentials (IRCs) as well as those hoping to transition to technical schools or community colleges for certificate programs or associate's degrees (ADs). In terms of students pursuing 4-year college degrees, we focus on the importance of options including dual enrollment (DE), Advanced Placement (AP) courses, and college entrance exams. This chapter includes interventions designed to help students make the best possible postsecondary educational choices.

THE SCHOOL COUNSELOR'S ROLE: CREATING A CAREER AND COLLEGE READINESS CULTURE

In Chapter 1, we addressed many federal initiatives aimed at career and college readiness (i.e., Every Student Succeeds Act, Reach Higher) and two important documents created by the American School Counselor Association (ASCA): the National Model (2012) and Mindsets and Behaviors (2014). Yet, in order to truly create postsecondary opportunities for students, school counselors need to create a sustained culture of career and college readiness spanning P–12 that includes all stakeholders (e.g., parents, students, community partners, administrators). One group that has done an excellent job defining specific ways to do this is the National Association for College Admission Counseling (NACAC). Originally approved by their executive board in 1990, NACAC continues to develop and maintain a *Statement on Precollege Guidance and Counseling and the Role of the School Counselor*. This document is important because it offers a perspective from outside the P–12 setting of how best to assist students in preparing for and transitioning to higher education.

The NACAC statement (1999) includes several noteworthy considerations. First, the statement highlights elements of an effective precollege program that is highly aligned with the ASCA National Model and addresses issues of equity in the precollege educational environment. Second, the NACAC underscores the need for ethical practice, administrative support, and that individuals working on college preparation with students are adequately trained. This is

critical given that higher education is evolving and so are students. What is expected today in the college admission process and for college success is qualitatively different than in years past, as we discuss in this chapter. Therefore, having school counselors who are adequately prepared with the most accurate and up-to-date information is necessary for students' success. In essence, the professional development of school counselors is a crucial investment.

The NACAC (1999) statement also takes a developmental approach (similar to this book) in how college preparation should be approached at the middle school and high school levels. At the middle school level, NACAC advocates for interventions designed to promote self-awareness about interests, values, and attitudes; career and educational planning; and an understanding of high school academic options related to careers and college. We agree that these are core developmental issues related to career and college preparation for middle school students and we address these topics in Chapters 10 and 11. For high school students, NACAC recommends a focus on career and college planning, goal setting, decision making, assisting parents and students in understanding the financial aid process, college visits, interviewing skills, and timelines for college applications. We agree that these are helpful skills to develop with high school students and address these in Chapters 12 to 15.

The degree of national interest in the topic of career and college readiness is directly related to the high stakes for America's future. As noted in Chapter 1, careers matter. Here, in Chapter 2, we focus on the pathway to careers through postsecondary education and training. Yet, more than ever before, that pathway may be a bit confusing, and both students and families may be unsure of the best option. We begin by exploring why college decision making has become so complicated.

DOES COLLEGE PAY OFF?

The answer is "yes" and "it depends." When thinking about college, traditionally, most people think of a 4-year degree. Numerous types of certificates, degrees, and postsecondary options exist in many different fields. How do we help students choose the right one(s) for them? An important part of school counselors' work will be to help students (and their families) become aware of the sometimes multiple options and pathways they could take to achieve their long-term career goals.

Recently, I, the first author, was on a high school visit observing a school counselor advising students in a career track class. It was part of a track in which students earn a Certified Nurse Assistant (CNA) certificate for completing specified course work in high school. The school counselor was advising the high school students on nursing degree options after high school through 2-year community college and 4-year university programs. After the lesson, the school counselor stated to me that most of the students completing the certificate were likely to go on to a complete 2-year Associate of Science in Nursing (ASN) degree but not a Bachelor of Science in Nursing (BSN) as the students

in this track did not have the prerequisites for 4-year college admission. The school counselor confessed that she often felt she had no other career options to tell the students in the CNA program about in group advisement other than nursing. I asked whether or not she had ever considered talking about other certificate and 2-year options in the medical field, like sonography. The school counselor asked me what a sonographer does, and I explained that some do MRI and others do ultrasounds, while others are even more specialized (e.g., cardiovascular).

I walked with her to a computer and helped her look up sonographer on the *Occupational Outlook Handbook* (U.S. Department of Labor, n.d.). In 2015, a sonographer needed an AS (2 year) and the occupation was growing by 24% (to put this in perspective, the average occupation for 2015 is growing by 7%). Median pay for sonographers in the United States is $63,630 per year (U.S. Bureau of Labor Statistics, 2015). In this case, a 2-year AS would definitely pay off if you consider that the degree is very quick to obtain, an individual would not need to accrue much debt to receive the degree, and once obtained, the likelihood of employability is high. Yet there are bachelor's and master's degrees that may not have this high of a payoff.

You can probably think of countless scenarios like this, one where you or other school personnel did not have comprehensive information to share with students. Indeed, it would be impossible to know of every potential career that exists. Yet, it is critical that school counselors are aware of the types of training programs offered in their schools, educational options available to students, and resources available to help broaden students' career and college exploration to view a large range of careers and postsecondary options. Another important activity school counselors can engage in is to help teachers learn about career and college options related to the courses they teach and point them to resources that will assist them in linking classroom content with the world of work. Teachers who are knowledgeable about their content areas may be the best allies in helping to determine what occupational areas are showing promising growth, sustainable income, and manageable degree or certification attainment costs.

Four Rules to the College Payoff

Carnevale, Rose, and Cheah (2011) noted that there are four basic rules in determining whether or not college pays off. *Rule Number One* is that degree level matters. Typically, this means the higher the degree, the greater the pay. *Rule Number Two* is occupational choice can mean more than degree level. For example, someone with a bachelor's degree in engineering may earn more than a person with a doctoral degree in History. The higher degree does not mean a higher salary in this case because engineers generally receive greater remuneration than historians.

Rule Number Three is that although occupation may determine salary more than a particular degree, the level of education within occupations still matters in terms of salary (Carnevale et al., 2011). In our previous example,

we stated that an engineer with a bachelor's degree may make a greater salary than a historian with a doctoral degree. Rule three basically states that within the field of engineering, engineers with higher degrees (i.e., master's or doctoral) make higher salaries than those with lower degree attainment (i.e., bachelor's).

Rule Number Four is that race or ethnicity and gender are complicating factors that actually matter more than education or occupation in determining earnings (Carnevale et al., 2011). Consider Carissa, an African American female who is the director of a human resources department in her company in Texas. She has a master's degree and 10 years of experience. In spite of her experience and education, the likelihood that she receives equal compensation to a White male in her same position with the same degree and same years of experience is not promising. In fact, according to the American Association of University Women's *The Simple Truth About the Gender Pay Gap* (2016), in Texas, median annual earnings for women are 79% of that for men. So for every dollar a man with her same credentials would earn, Carissa would earn $0.79.

The States' Historic Disinvestment in Higher Education

As a result of the 2008 economic recession, unprecedented widespread and deep cuts to funding for higher education were made across the United States. From 2009 to 2012, 48 states decreased funding to higher education through direct support to public institutions, and these cuts ranged from 14.8% to 69.4% (Mortenson, 2012). Concomitantly, due to unemployment or poor employment possibilities during the recession era, many individuals left the workforce and returned to higher education to seek degrees or certifications that would make them more marketable (Baylor, 2014). Also, student enrollments increased by 13.7% in the years 2008 to 2012, and federal student loan borrowing increased in those same years by 54.6% (Baylor, 2014). In sum, as states decreased funding to higher education to make up for budget deficits, student tuition increased substantially. At the same time, student enrollments increased. This leaves institutions of higher education in somewhat of a quagmire in that it is unlikely that states will reinvest fully the funding that was cut during this historic period. Yet, keeping college affordable and providing the necessary revenue to keep higher education afloat is a difficult balance.

Blumenstyk (2015) noted three trends that emerge as colleges and universities now have to compete for tuition revenue that offsets the loss of state investments: (a) greater recruitment of graduate students who often pay a higher differential per credit hour, (b) greater recruitment of out-of-state and international students who pay higher rates, and (c) placing more courses and programs online to offset the cost of instructors, materials, buildings, maintenance, and being able to retrieve a higher per hour credit amount. These trends are concerning, especially because they place an incredible financial strain on the most academically vulnerable populations (e.g., low socioeconomic status [SES], first-generation students). These are the students who most often need greater access to higher education in terms of affordability.

Student Loan Debt

According to *The Economist* (2015), student loan debt tripled from 2004 to 2014, and in the United States currently, student loans now total over $1.2 trillion. Additionally, student loan debt has increased at twice the rate of inflation (The Institute for College Access & Success, 2015). Students whose degrees were from for-profit colleges seem to struggle the most in terms of repaying their loans, with almost 20% defaulting on their loans within 3 years (The Economist, 2015). Based on information from the Institute for College Access & Success's Project on Student Debt (2015), 69% of college graduates from public and nonprofit colleges in 2014 had student loan debt, and the average debt per borrower was $28,950. According to *U.S. News and World Report* (2015), the average loan default amount is $14,000 or less.

Given the increase in cost of college and the high likelihood that students will incur some debt to attend college, school counselors need to be cognizant of ensuring that (a) students have full access and exposure to a career and college readiness curriculum, (b) students are aware of opportunities to earn college credit while in high school, (c) students and parents are provided with financial literacy training pertaining to budgeting for college throughout the P–12 experience, and (d) students explore the many paths to the field of their choice to determine the best college payoff option.

The Value of a Liberal Arts Degree

In an era where the cost of college is increasing dramatically, and student loan debt is skyrocketing, students and their families may wonder if it would be more prudent to pursue shorter degree options. For example, rather than seeking a Bachelor of Science degree in Computer Science, a student might wonder if her career goals in the Computer Science industry are achievable with an AS. As a school counselor, it is important to know each student's hoped for outcomes when giving postsecondary advisement. What, ultimately, is the student's career goal? Is the student able to work and go to school? Does the student have access to financial support (scholarships, grants, family support)? What degree aligns to the student's career interest? It is important to help students and their families weigh all of this information rather than just deciding to go with the cheapest or quickest option.

It is also essential to remember that many students and their families may not know what is additive about the college experience beyond academic content. As McNutt (2014) underscored, the value of a 4-year liberal arts degree is more than just learning about humanities; it is critical thinking, problem solving, and group work. Although there are many shorter options to satisfying career outcomes, we do want to note that the value of college is often beyond the classroom walls. Opportunities for leadership, mentorship by professors, and access to labs and research may be very important to developing career and life experiences for many students. As we review various postsecondary options, we do not want to exalt one option over others.

We are simply highlighting each in the hope that school counselors will expose students to a variety of opportunities and help them explore the potential benefits and limitations of each.

UNDERSTANDING THE VALUE OF A DEGREE IN CONTEXT

All postsecondary educational options have to be understood in context. What can a person do with a particular certificate or degree? Are subsequent degrees necessary to accomplish the goals particular to an individual's career aspirations? Is there high selectivity within programs and, if so, are the selection criteria based on grade point average (GPA), test scores, or other data? Beyond the degree, are there certifications, licenses, board exams, or other credentials that must be obtained to practice in the field? All of these questions are important to examine in considering how much education, training, experience, and cost will be incurred to pursue a particular career path or achieve a career goal. Additionally, understanding both how a career is trending in terms of projected outlook for growth and the anticipated need for a career within different geographical locations are important considerations when working with students to consider careers within context.

For example, imagine a student, Jorge, is interested in psychology and believes he would like to be a clinical psychologist. His school counselor, Mr. Rabin, explores with Jorge the pathway to becoming a clinical psychologist. Together, they discover that Jorge will need to obtain a bachelor's and a doctoral degree. In addition, he will need to complete an internship or residency. Based on the *Occupational Outlook Handbook* (U.S. Department of Labor, n.d.), they note that this career path is growing at a higher-than-average rate (projected at 19% growth). Jorge has no concerns about attending school all the way through a doctoral degree. He is fully committed to this path and to making the financial choices to make this happen.

College Decision-Making Factors

Many factors influence students' decisions about where to attend college. The choice of school is a major life decision, and much has been studied about how students make their decisions. The salience of certain factors has been found to vary to some degree by race, ethnicity, and gender; yet, the overarching main factors identified in literature as influencing students' college choices include cost, cost savings, academic reputation of the institution, peer influence, and parent involvement and expectations (Holland, 2011; Lee, Almonte, & Youn, 2013; Lillis & Tian, 2008). In a study of college tour participants, Curry, Latham, and Sylvest (2015) found that students fell along a spectrum of college decision-making readiness factors including: financial literacy, family influence, social influence, knowledge of academics, personal awareness, career choice and program alignment, understanding of campus culture, and understanding college resources. Curry et al. (2015) found that financially literate students made college decisions from a comprehensive

understanding of money. They understood debt, credit (good and bad credit), subsidized versus unsubsidized loans, the difference between a grant and a loan, and how a credit card was different from a debit card; they had been to a bank and had balanced a checkbook, and some had a planned budget for their first year of college. Curry et al. suggest that to be truly financially literate and ready for college, students do not necessarily need to avoid colleges where they will take on debt. They should, however, be able to describe types of debt, the amount of debt, and how long debt will take to pay off along with how much they will realistically earn.

Sometimes, the financial choices students will need to make are more nuanced. For example, imagine a student, Karen, is awarded a scholarship to a state university that will fully cover her tuition. Her parents urge her to go there. She also applies to a very expensive private college and finds out that she has been given a scholarship that will cover her tuition and fees. The cost of living will be higher at the private school, and there is a required meal plan for first-year students. However, she would have to pay fees, and room, and board at the state school as well. After her family calculates the annual difference in cost, it comes to $900. For the difference in class size, program offerings, faculty mentoring, and institutional reputation, Karen decides the $900 per year is well worth it to accept admission at the private college. In this example, Karen's values and her estimation of the difference in cost and the benefits from each school were weighed in making an informed decision.

In terms of knowledge of academics, students should be aware of the types of programs offered at specific schools, whether or not programs are accredited, and whether or not credit is transferrable to other institutions. For example, if a student plans to start at a community college, does the 4-year state university she is interested in have an articulation agreement to accept credit earned? Students and families also are encouraged to gather information about what enrolling in college as "undecided" or in a program for students who are unsure of what to initially major in might look like academically. Many students enter college undecided, but every college has different requirements for how soon a student is required to choose a major and also for the types of courses they would be eligible to enroll in prior to formally selecting a major.

Finally, the college-ready student also should be able to weigh the interests of social, peer, and family influences in making a college decision in a healthy and balanced way. During Curry et al.'s college tour study, one participant, who we'll call Chris, told members of the research team, "I plan to attend X university because my family and I have tailgated there since I was born. My parents would disown me if I went anywhere else." This young man had not chosen a major but had chosen a university based on the football team. Although we agree tailgating is fun, our recommended practice is to challenge students to weigh many factors. Another participant, who we'll call Levi, made a different choice based on personal awareness. He stated, "I really know myself too well to pick a party school. I don't want to go to a large university like X because every weekend is football and tailgating. I don't think I would focus on my classes. I want to have fun, but I need to remember why I am in