Introduction to Dual Credit

HIGHER EDUCATION CONSTANTLY negotiates its way through a jungle of internal and external pressures in an effort to help more students attend and graduate from college. The path is treacherous, because changes in one area may result in potentially damaging consequences elsewhere. For instance, as states reduced public support for higher education, colleges responded by increasing tuition (Woodhouse, 2015). Raised tuition affects the ability of low socioeconomic groups to attend (Adair, 2001; Engberg & Allen, 2011; Wellman, 2006) and complete college (Shulock, Callan, Finney, Kirst, Spence, & Usdan, 2010), which in turn affects their economic futures as well as the global competitiveness of the country (Palmer, Davis, Moore, & Hilton, 2010; Wagner, 2006). Arne Duncan, the former Secretary of the Department of Education (2009–2015), stated that focusing on individual concerns could obscure the true issue, which is “graduating students with high quality degrees” (Stratford, 2015, para. 1). Nevertheless, U.S. colleges must address a range of issues such as affordability and access to ensure more students graduate with postsecondary degrees.

The statistics tell the story of a “broken” system (Stratford, 2015, para. 4). Most recently, the National Student Clearinghouse reported that the 6-year college graduation rates for first-time students hover around 55% (Chronicle of Higher Education, 2015). Researchers have identified one reason students do not complete their degree is a lack of preparation for college-level coursework (for example, Callan, Finney, Kirst, Usdan, & Venezia, 2006). This is the reality for a majority of high school graduates who have fulfilled all requirements to attend a college only to find that they have to take remedial/developmental
noncredit courses upon arrival at a campus (Shulock et al., 2010). In fact, 75% of community college students and approximately 50% of first-year college students attending a less selective 4-year institution are required to take remedial coursework because they are deemed unprepared for the rigors of college (Shulock et al., 2010). This is particularly an issue for first-generation students, who are the first in their families to attend college, and other groups who are underrepresented in higher education (for example, students from low-income backgrounds and students of color) (Hoffman & Webb, 2009; Kirst & Bracco, 2004; Yeado, 2013).

As more high school students aspire to go to college, policymakers have noted the importance of maintaining students’ momentum and motivation (Adelman, 2006; Attewell, Heil, & Reisel, 2012). With a focus on college access and degree completion, many states address this concern by attempting to create a seamless education system (Domina & Ruzek, 2012). The hope is that through better alignment between higher education and K–12, there will be a reversal in the alarming statistics. As a result, states have created new leadership roles, collaborative councils, and policies (Perna & Armijo, 2014) to address critical challenges regarding college access and degree completion (Kirst & Bracco, 2004), yet little is known about their effectiveness on student outcomes (McLendon, Heller, & Lee, 2009).

In addition, Clifford Adelman (2006) and Joshua Pretlow and Heather Wathington (2014) among others argued that providing a rigorous high school curriculum is key to students’ college success. As a result, a number of curricular innovations have also been introduced to help students in their transition to college and to a timely graduation. Three initiatives—Advanced Placement (AP), International Baccalaureate (IB), and dual credit—allow high school students to take courses that count toward both their high school and college course requirements. These programs introduce high school students to a more rigorous curriculum in order to prepare them for college demands and to promote students’ college success (Adelman, 2006; Pretlow & Wathington, 2014).

Dual credit programs, in particular, have experienced an explosion over the past 40 years and continue to thrive today (Hoffman, Vargas, & Santos, 2009). Specifically, in 2010–2011, approximately 2 million high school
students took dual credit courses and 82% of all high schools offered them (Thomas, Marken, Gray, & Lewis, 2013), which is an increase of 67% from 2002–2003 (Mangan, 2014). In contrast, Nina Thomas, Stephanie Marken, Lucinda Gray, and Laurie Lewis (2013) reported that in the 2010–2011 school year only 69% of U.S. high schools offered AP and/or IB. Thus, dual credit is more widely available than those other accelerated learning options. As a consequence, many educators have noted that dual credit is a “promising strategy” (Hofman, 2012, p. 3) in terms of state and federal completion goals (Adelman, 2004, 2006).

**Purpose of the Book**

Barshay (2013) argues the challenge is that these courses are becoming “institutionally entrenched before we know whether they work” (para. 12). Therefore, this volume is dedicated to exploring the unique curricular innovation known as dual credit. The goal of the book is to tease out the uniqueness of dual credit offerings, policies, challenges, and benefits and to synthesize the research, to date, on this widely accepted, but underresearched initiative. In our effort to do so, we plan to address the following questions:

1. What is dual credit?
2. How does dual credit differ from other precollege credit-bearing courses?
3. What are the various dual credit models?
4. What are the students’ experiences in dual credit?
5. What are the benefits and challenges associated with dual credit?

Therefore, this book details the varied models and forms of dual credit to better understand if this innovation achieves the many policy goals linked to it.

The next section offers a brief introduction to each precollege credit-bearing option, their distinct traits, and their benefits and challenges to help explain what makes dual credit particularly instrumental in addressing the
current national educational concerns. After discussing dual credit, in general, the chapter concludes with an explanation of the book’s structure.

**Precollege Curricular Options**

The three primary curricular innovations are Advanced Placement, International Baccalaureate, and dual credit. Each program is distinct and appeals to specific student populations with unique benefits and liabilities.

**Advanced Placement**

Perhaps the best known of these three academic programs is AP, which began in the 1950s (College Board, 2003). This program offers college-level courses to high-achieving students in the high school setting (Geiser & Santelices, 2006). The design has changed very little from its inception. After taking the course, students may choose to take an exam, which was developed and is administered by College Board. The student must earn at least a three out of five on their high school AP course exam to count toward their college course requirements and place them in more advanced college courses (Warne, Larsen, Anderson, & Odasso, 2015). Significantly, research has determined that the benefits associated with taking these courses on college grade point average (GPA) and persistence are gained only by those students who pass the exams (Warne et al., 2015). Therefore, the benefits linked to these courses are limited, at best.

Moreover, although there has been a steady increase in the number of students taking AP courses, African American, Hispanic, and American Indian/Alaska native students continue to be underrepresented in these classrooms (College Board, 2014; Solorzano & Ornelas, 2004). Those minority students who take the course and elect to take the exam are less likely to score a three or higher than Whites and Asian American/Pacific Islanders (College Board). Thus, they do not garner the advantages associated with taking the courses and passing the exams. Others have noted that even though these courses are considered to be quite rigorous, they are taught in a high school setting by high school teachers so they do not introduce the students
to college-level work or the college environment (Jenkins, 2013). Researchers (such as Vincent Tinto, 1993, and George Kuh, Robert Gonyea, and Julie Williams, 2005) found students who have a more realistic understanding of the campus atmosphere are more likely to have a successful adjustment to college. Thus, AP students are not gaining that important exposure to a college campus.

Finally, even though the standardized AP tests give higher education institutions an assurance of course quality and student competence (Geiser & Santelices, 2006), some elite institutions (for example, College of William and Mary) have decided no longer to accept AP credit as fulfilling core requirements (Berrett, 2014). They find that these courses stress retaining information and not developing cognitive thinking skills, which are deemed more valuable at the college level. Therefore, there are mixed results on who gains from the AP experience and the value of these courses toward students’ success in college.

**International Baccalaureate**

Unlike AP, which offers students the opportunity to take specific advanced coursework, the IB offers a complete curriculum structured around a set of ideals (Rudbeck, n.d.) that are both academic and philosophical. The goal is to develop true global citizens who are academically strong, but also “principled,” “open-minded,” and “caring” individuals (IB Organization, 2013, p. 3) who want “to create a more just and peaceful world” (IB Organization, p. 1). The seeds of the IB program date back to the 1920s and 1930s, but the first actual offering was the Diploma Programme in 1968, designed for junior and seniors in high school (White, 2010). The initial impetus for these programs was to educate the children of diplomats, business leaders, and scientists who were not living in their home countries (Atkinson, 2008) and prepare them for attendance at any university. Today, in addition to the Diploma Programme, there are also the Middle Years, Primary Years, and the Career-related Programmes. Thus, IB has the potential to educate students ages 3–19 (Atkinson; Frankel, 1974). The Diploma Programme, like AP, targets high-achieving students and helps them get ahead academically by providing a
standardized curriculum and tests, which assure colleges and universities of their academic excellence.

Further, IB schools have in place measures that ensure accordance with the original principles. For example, each IB campus has been authorized so that “no matter where it is located, [each school] is held to the same high standard” (IB Organization, n.d.-b, para. 7). The teachers receive professional development “that encourages critical thinking, self-reflection, and dedication to lifelong learning and continuous improvement,” which are the hallmarks of this initiative (IB Organization, n.d.-a, para.1). Instructors also have earned specific certifications in teaching and learning and/or leadership guaranteeing their expertise (IB Organization, n.d.-a).

Today there are thousands of schools in almost 150 countries offering IB programs (International Baccalaureate, 2011), but only a small percentage of those schools are located in the United States. In 2006, only 752 high schools in the United States offered the Diploma Programme compared to 16,000 U.S. high schools that provided AP coursework (Koebler, 2011). Jason Koebler (2011) provides three key reasons why IB schools are less popular in the United States than in other countries. First, the programs are more expensive than AP and dual credit programs. Second, the goal of developing global citizens is not as much of a priority in U.S. schools as it is elsewhere. And, finally, and perhaps most important, there is no evidence that IB graduates succeed at a greater rate than students in AP programs.¹ Therefore, IB is not as widespread in America and, as a result, has less influence on the college success of students.

**Dual Credit**

For the purposes of this volume, *dual credit* refers to courses high school students take where they earn both high school and college credit simultaneously without having to take a standardized test to gain the credit (Adams, 2013). Although this is a relatively recent innovation, conversations about creating closer connections between secondary and postsecondary institutions date back to the 1920s. At that time, educators who supported the community college movement argued that it was important
to facilitate students’ progression from high school to college to increase student success in both (Mayo, 2012). However, structural challenges between the different educational sectors undermined any active efforts at that time.

By the time dual credit resurfaced in the early 1970s, proponents overcame the structural issues and created meaningful collaborations between postsecondary institutions and local school districts. In 1973, the Syracuse University’s Project Advance was the first dual credit program (Greenberg, 1989) that offered college-level courses to high-achieving high school students (Exby, 2014). High school and college faculty adapted one-semester introductory college courses to two-term dual credit courses in biology, calculus, chemistry, English, sociology, psychology, and computer engineering (Greenberg). High school teachers taught the courses after they participated in a summer training program offered by the University.

There are two critical distinctions between this first program and dual credit today. First, the high school students had more time (two semesters) to learn the material, which is not the case for most current dual credit courses. Significantly, it was this extended period of time to cover the material that was credited as one reason for the program’s success (Greenberg, 1989). Second, students did have to take an exam designed by University personnel to receive college course credit (Greenberg). Yet, in spite of quality assurances, Greenberg (1989) reports the findings from a 3-year study conducted by Wilbur and Lafay (1978) that found the dual credits did not transfer to a higher education institution for about 10% of the students and “15% received credit but not exemption from the course” (Greenberg, p. 24). This finding foreshadows the issue of transferability of course credits, which continues to haunt dual credit programs today.

Yet, since that first offering, the innovation has rapidly gained supporters for several reasons. One of the primary advantages is that participation in dual credit programs saves student’s money, because in the best-case scenario the courses count for both high school and college credit. As a result, students have to take fewer college courses to graduate, reducing the cost of college. In turn, this decreases the time to degree (Karp, 2013; Krueger, 2006). Thus, dual credit seems to provide academic momentum, which has been found to
increase the likelihood that students graduate from postsecondary institutions (Adelman, 2006; Attewell et al., 2012). Further, students gain additional benefits when colleges offer the dual credit courses. In these cases, students are exposed not only to course rigor, but they also are introduced to the college environment, which has been found to assist students in their college adjustments (for example, Pretlow & Wathington, 2014).

Finally, as dual credit models evolve, a more diverse group of students are able to enjoy the benefits associated with participation in these courses (Hughes, Rodriguez, Edwards, & Belfield, 2012). Unlike AP and IB, which have remained focused on high-achieving students, dual credit has become a strategy that helps provide career training for technical fields as well as college access to previously underrepresented student groups (Bailey & Karp, 2003) (see the fourth chapter for more information about student outcomes associated with dual credit). As a result, these benefits have led policymakers to support dual credit in their efforts to address college completion goals. However, these courses have also been met with resistance from some higher education institutions because they question their rigor (Exby, 2014). In upcoming chapters, we discuss these critiques in greater depth. However, in the next sections, we explain dual credit terminology and briefly cover some of the reasons for the criticisms of the innovation.

Distinguishing Dual Credit

One of the many challenges in studying dual credit is the lack of consistent terminology (see Table 1). These courses may be referred to in a number of ways. Perhaps the most generic terms for these courses are credit-based transition programs (Bailey & Karp, 2003) or accelerated learning options (Anderson et al., 2006). Thomas Bailey and Melinda Mechur Karp (2003) and Amy Berk Anderson and her associates (2006) at the Western Interstate Commission for Higher Education (WICHE) Policy Analysis and Research Unit suggest these terms apply to a range of programs, including AP, IB, middle college high schools (MCHSs), career and technical preparation, and dual credit courses. The common thread between these offerings is that each helps students earn college credits while in high school. However, because they are umbrella terms


**TABLE 1**  
**Terminology for Accelerated Learning Options**  

<table>
<thead>
<tr>
<th>Type</th>
<th>Definition</th>
<th>Standardized Exams</th>
<th>Location</th>
<th>Instructor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Advanced Placement (AP)</td>
<td>Standardized curriculum, credit based on test</td>
<td>Yes</td>
<td>High school</td>
<td>High school teacher</td>
</tr>
<tr>
<td>International Baccalaureate (IB)</td>
<td>Standardized curriculum</td>
<td>Yes</td>
<td>High school</td>
<td>High school teacher</td>
</tr>
<tr>
<td>Concurrent or Joint</td>
<td>Courses can count for both high school and college or just college. In some instances, term applies to college students taking courses at two institutions simultaneously.</td>
<td>No</td>
<td>High school, college</td>
<td>High school, college</td>
</tr>
<tr>
<td>Dually Enrolled</td>
<td>High school students take courses at two locations.</td>
<td>No</td>
<td>High school, college</td>
<td>High school, college</td>
</tr>
<tr>
<td>Dual Credit</td>
<td>A single course fulfills both high school and college requirements.</td>
<td>No</td>
<td>High school, college</td>
<td>High school, college</td>
</tr>
</tbody>
</table>

encompassing a range of curricular innovations, we do not use them interchangeably with dual credit in this text.

Another generic term sometimes applied to college-credit bearing courses is *concurrent or joint enrollment* (American Association of State Colleges and Universities, 2002). Susan Harkins (1998) and others identify a number of types of concurrent enrollment options. One type is when high school students take courses at their high school, taught by high school teachers, which count toward their high school and college course requirements (Exby, 2014; Harkins, 1998; Sagers, 2000). This definition is similar to the one offered by the National Alliance of Concurrent Enrollment Partnerships (NACEP), the concurrent enrollment accreditor, which adds that these courses must be
taught by college-approved high school teachers (NACEP, n.d.-b). This type of course offering would also fall under the definition of dual credit, which we are using in this text. The second model is when a college faculty member offers the course to high school students either at the high school or online (Harkins). This example would be considered dual credit in this monograph, if the student earned credits that would count toward both high school and college requirements.

Yet, there are other examples that would not fall under the definition of dual credit as applied in this volume. For example, Harkins (1998) suggests concurrent enrollment is also when high school students enroll in classes at a postsecondary institution where only college credits are earned (Andrews, 2001; Harkins). This type would not count toward our definition of dual credit, because the student earns only college credit. Other examples that would not apply are when a college student takes courses at two postsecondary institutions (Golann & Hughes, 2008) or when nonmatriculating students register for courses offered to students enrolled on a campus (UCLA Extension, 2014–2015). For example, a student not accepted by University of California, Los Angeles (UCLA) can sign up for a UCLA course through UCLA Extension's concurrent enrollment, if space is available. Because the students are not in high school in these examples and are earning only college credits, these models are outside the dual credit parameters used in this book.

Technically, students who are enrolled at both the high school and a college are referred to as being dually enrolled. However, some researchers note that these courses may not count for credit, which distinguishes dual enrollment from dual credit (Kim, 2008). In addition, if the student is taking a course on a college campus, it may count only as college credit (Hughes, Karp, Bunting, & Friedel, 2005), in which case it does not fulfill requirements in both sectors.

Therefore, to avoid confusion, we use the term dual credit exclusively in this text, even though dual credit and dual enrollment are frequently used interchangeably in the literature. Dual credit refers to courses that count simultaneously for both high school and college credit. However, it does not require students get a certain grade on a standardized end-of-course exam to get credit for the course as is necessary for AP or IB courses. Moreover, dual
credit courses can be offered at a high school or postsecondary institution (in person or online) and may be taught by high school or college instructors.

**Types of Dual Credit**

Bailey and Karp (2003) broadly identify three types of dual credit programs—singleton, comprehensive, or enhanced comprehensive (see Table 2). They define a program as singleton if students take an individual course that satisfies both their high school and college requirements. These courses are elective courses designed to introduce students to college-level coursework, but do not consume the student’s entire high school experience. As such, they do not recreate a postsecondary experience. Instead, these courses augment the student’s secondary education and allow students to “get ahead” while in high school. Singleton programs are typically provided by the high school, and high school teachers teach the courses. AP courses are the most common singleton program, but some dual credit and tech prep programs also fall into this category. Students in these programs are typically highly motivated students who are pursuing an academic challenge.

The program is comprehensive, when the majority, if not all, of the courses, a student takes earns both high school and college credit, simultaneously. These programs provide students with specific articulated college credit

<table>
<thead>
<tr>
<th>Type</th>
<th>Definition</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>Singleton</td>
<td>Individual elective course intended to introduce students to rigor of college courses and earn college credit</td>
<td>AP, some tech prep, and dual credit programs</td>
</tr>
<tr>
<td>Comprehensive</td>
<td>A series of courses or entire curriculum designed to introduce students to academic rigor in their last 2 years of high school</td>
<td>IB, some tech prep, and dual credit programs</td>
</tr>
<tr>
<td>Enhanced Comprehensive</td>
<td>Courses are a part of a complete curriculum of only dual credit courses that offer student support services</td>
<td>Middle college high schools (MCHSs), early college high schools (ECHSs)</td>
</tr>
</tbody>
</table>

*Source: Bailey & Karp, 2003.*
opportunities in their final 2 years of high school. Like singleton programs, the primary goal of comprehensive programs is to introduce students to college rigor and expectations. Comprehensive programs include IB as well as some dual credit programs. Students in comprehensive programs include academically advanced and middle-achieving students.

An enhanced comprehensive program comprises most of a student’s high school experience. In addition to the challenging coursework, these programs seek to support and address all facets of the transition to college by offering counseling, mentorship, and other student support services. Students in these programs are typically middle- to low-achieving students or from traditionally underrepresented backgrounds. This would apply to early college high schools (ECHSs) or MCHSs where the entire enterprise is focused on offering dual credit coursework and support programs specifically geared for students participating in this type of curricular experience.

Areas of Variability
Dual credit programs are perhaps the most unique of the credit-based transition programs mentioned here because there is variation not only with the other precollege initiatives but also between each other in terms of delivery, funding, student participation, instructor eligibility, and course content. Thus, dual credit may look quite different depending on the state, the school, and the student.

Settings for Delivery. These courses may be offered in a wide range of academic settings. Students may take these courses in a traditional high school setting, online, at a community college or 4-year institution, or in a unique high school setting that is focused on providing a dual credit curriculum starting as early as the ninth grade or as late as the student’s junior year (Karp, Bailey, Hughes, & Fermin, 2004). These unique settings are early college or MCHSs (see the second chapter for research on dual credit offered through postsecondary institutions, and the third chapter for dual credit in high school settings including these innovative dual credit campuses). Significantly, courses taught at the high school are often criticized for not being college level; yet courses at postsecondary institutions may also lack rigor. In some instances, colleges may offer “fun” dual credit courses as “recruitment
tools” to attract students to apply after high school graduation (Brown-Lerner & Brand, 2006, para. 11). Even if the courses are not used in this way, the lack of quality control regarding course content has resulted in postsecondary institutions refusing to accept some dual credits once students matriculate as first-year college students (Borden, Taylor, Park, & Seiler, 2013). Therefore, issues of course quality and course transferability are closely linked to the variability in course content and the course setting.

Into this vacuum, states have enacted policies governing dual credit offerings and a voluntary national accreditor, the NACEP (n.d.-b), has stepped in to ensure the quality of concurrent classes (NACEP). As of April 2015, NACEP is active in 46 states, 218 community colleges, 104 4-year institutions, 37 high schools and districts, and 20 state agencies or systems (NACEP, n.d.-a). Though this is an important step, this includes only a small fraction of dual credit offerings.

**Funding.** Funding for these courses varies as well (Borden et al., 2013). Some states may pick up the cost of one or all dual credit courses, and in other instances there may be reduced or waived fees for a limited number of courses (Tobolowsky & Ozuna, 2016). Both the high school and the college can receive state funds to cover the cost of the courses (Karp et al., 2004), which has led some policymakers to express concern regarding the potential for fiscal impropriety (Zimmerman, 2012). In some instances, the students are responsible for the entire cost of these courses, which can range dramatically (for example, course fees ranged from $85 to $600 in our study; Tobolowsky & Ozuna, 2016). In Joshua Pretlow and Jennifer Patteson’s (2015) study, Ohio students are responsible for the cost of their dual credit classes, which range from free to $180 a credit hour. Interestingly, Ohio policy has the higher education institution set its own course fees. This approach created a climate of competition leading some colleges “to call high schools to determine what other institutions were charging and then work with a high school to offer courses at a lower rate for [their] students” (p. 26). As a result, the costs are variable—with students at one high school potentially paying less than students at another.

Stephanie Marken, Lucinda Gray, and Laurie Lewis (2013) used national data from 2011 and provided specific information about who pays for all or
part of these courses: postsecondary institutions (77%), students and their families (66%), the secondary schools and districts (44%), the state (38%), and other sources (10%). The Education Commission of the States (ECS) (2015) breaks down the funding models by state. They report that the policy in nine states is for the students and their families to pay for these courses. The school district pays the bill in four states and it is a decision between the secondary school and the postsecondary institution based on the specific dual credit offering in 14 states. Perhaps most interesting is that there is no state policy regarding funding in four states. These statistics reveal the piecemeal approach taken regarding funding for dual credit courses.

**Student Participation.** Although initially dual credit coursework was designed to advance the success of the best high school students (Edwards, Hughes, & Weisberg, 2011), there has been limited research that argues that all students (for example, underrepresented populations, middle- to lower-achieving students, low-income, remedial students) benefit from taking these courses (Bailey, Hughes, & Karp, 2003 (see the fourth chapter for more about student outcomes associated with dual credit coursework). Consequently, dual credit is available in some form to most high school students in the United States (Krueger, 2006).

Participation in dual credit programs is delineated by admission criteria set by the postsecondary institution, the high school, or both entities (Karp et al., 2004). Most (63%) dual credit programs do have eligibility requirements (Thomas et al., 2013). Those requirements often include minimum scores on SAT or ACT, grade level, class rank, and/or high school GPAs. In some instances, students need a letter of recommendation. For some programs, students must apply for acceptance and show they are underperforming in their current high school but have potential (for example, MCHSs and ECHSs) (Smerdon et al., 2005). Borden and associates (2013) noted that 32% of the institutions offering dual credit had other requirements, which were not identified. Therefore, this shows great variability in the student eligibility requirements.

Although most dual credit policies stipulate eligibility requirements, some researchers question the assumption that students who qualify for these courses are actually ready to enroll, particularly when these courses are
offered on a college campus (for example, Tinberg & Nadeau, 2013). Howard Tinberg and Jean-Paul Nadeau (2013) interviewed four dually enrolled students in a community college composition course at three points in the semester while analyzing the students’ coursework. They found that some students showed a lack of understanding and skills and attributed that to insufficient experience and subject knowledge, which they would have gained in a traditional high school course where instructors typically take a more developmental approach to content. Nevertheless, Tinberg and Nadeau presented these findings cautiously because of the small sample and no control group. However, they suggested this does raise a potential issue that some students are unprepared to take college-level dual credit courses even though they have access to them and meet the requirements. Other researchers found that students may have the academic talent to enroll in these courses but lack sufficient maturity to manage in the less-structured college environment (Ferguson, Baker, & Burnett, 2015; Kanny, 2015).

**Instructor Eligibility.** One of the most problematic issues with dual credit courses is the lack of uniform assurance practices/policies in place regarding the quality of instruction. Even though 79% of the states have policies regarding instructor selection, training, and credentials for these courses (Borden et al., 2013), there are wide variations, because of the lack of national standards. When there are criteria, they typically require the high school instructors to meet the same standards as adjunct community college faculty (Borden et al., 2013), including a master’s degree and expertise in the subject. However, Borden and his associates (2013) noted that 10 states had no policies at all.

**Course Content.** Karp and associates (2004) found that states determine which courses can be offered for dual credit. In most cases, the college or the high school will approve the course syllabus, textbooks, and/or exams. However, in some instances, the approval for the syllabi and so forth rests with the state. Because the course content is not standardized, students taking the same subject may not cover similar material. Additionally, there is no standardized test to measure student knowledge (Andrews, 2000; O’Brien & Dervarics, 2012) as there is for AP or IB courses. As a result, there is no assurance that
two students who take dual credit coursework in the same subject will come into a college classroom equally prepared.

Also, although initially many of the offerings were designed to provide college-level content to high-achieving high school students, this is not always the case. Some specific dual credit offerings target middle- to lower performing students and others are linked to vocational students (Golann & Hughes, 2008). Thus, the course content can vary dramatically depending on the nature of the dual credit program and the students it is intended to serve.

Significantly, lack of quality control regarding these courses leads to issues with the transferability of course credit. Brian Modarelli (2014) studied the transfer of credits from dual credit programs and found “competitive” and “highly competitive” postsecondary institutions were likely to accept associate degree credits from other institutions (78%) except when the degrees (and credits) were the result of dual credit programs (19%). The more competitive the institution the less likely they were to accept the credits. In comparison to other accelerated learning options, AP credits were more likely to be accepted by the most competitive institutions (70%) followed by IB (59%) and then dual credit (33%). Modarelli concluded that this should give students pause when making their college choice decisions. It also is a concern to policymakers who advocate dual credit to students to reduce the cost and the time it would take to earn a college degree.

Structure of the Book

This volume explores the many types of dual credit offerings linked to specific locations and delivery methods and their benefits and challenges in more depth. Although most dual credit courses are offered at community colleges, in the second chapter, we look specifically at dual credit courses offered at and by community colleges as well as at 4-year institutions. We explore the range of models, both face-to-face and online, and discuss the benefits and challenges of each, the policies and practices associated with that type of offering, issues regarding student and instructor eligibility, and credit transferability.

Although this is the most common model, it is not the only one. Therefore, in the third chapter, we explore dual credit courses offered in the high
school, including both ECHS and MCHS models. The ECHS model has been touted by the Gates Foundation as the best structure to support the success of underrepresented students while exposing students to academic rigor through dual credit coursework. Although of late there has been less attention given to MCHSs in scholarly and popular press, they also were designed to address these same needs. This chapter also covers the policies and practices associated with these offerings, instructor eligibility, student participation, and funding.

Then, in the fourth chapter, the book shifts to discuss the students’ experiences in dual credit and presents the limited research on the specific benefits and challenges for different student populations (that is, high-, middle-, and low-achieving students; traditionally underrepresented students; and male and female students) who participate in dual credit. We look specifically at the available research that links student outcomes to dual credit coursework. Unlike AP courses, these offerings have been found to assist not only the high-achieving students but also traditionally underrepresented student groups who are less likely to participate in the other credit-bearing programs.

To this point, the book has explored the current state of research, exposing the extreme variability of dual credit programs. In the final chapter, we offer recommendations for the next phase of research focused on gaining a better understanding of how these programs affect students’ experiences and outcomes. The fifth chapter concludes with a discussion of the future of dual credit in terms of structure, format, and policy.

We hope our overview of the current state of research on this fast-expanding initiative will help educators in K–12 and higher education as they work to help students successfully transition into higher education, policymakers concerned with college graduation rates and for the success of all students, and researchers who can address the need for more work to be done on this highly influential, but understudied, curricular innovation.