



## **College 101 Courses for Applied Learning and Student Success**

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## **Abstract**

College 101 courses—also called student success, introduction to college, orientation to college, or freshman experience courses—provide students with information about college and campus services, assistance with academic and career planning, and techniques to improve study habits and personal skills. This study investigated College 101 courses at three community colleges in Virginia through interviews with 169 college staff members, faculty members, and students combined with observations of 19 course sections. Although College 101 courses were found to be widely supported by stakeholders, contextual factors made implementation challenging and undermined the courses' potential to create long-lasting impacts on students' outcomes. College 101 courses provided students with important information, but they did not offer sufficient opportunities for in-depth exploration and skill-building practice. However, the authors found strong evidence of the worth and promise of College 101 courses and identified ways to optimize them and generate long-term results.

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## **1. Introduction**

College 101 courses—also called student success, introduction to college, orientation to college, or freshman experience courses—typically provide beginning college students with information about college and campus services, assistance with academic and career planning, and techniques to improve study habits and personal skills. Their goal is to familiarize students with the collegiate environment and give them the tools they need to persist in postsecondary education and earn a college credential. The structure and focus of College 101 courses vary widely. Some are one-credit courses, some are worth three-credits, and others are combined with an academic course. Some focus on college readiness skills, such as note taking, and others take a more holistic approach and include topics such as personal wellness. Most include discussion of campus resources, policies, and procedures.

College 101 courses are prevalent at both two- and four-year colleges. According to a 2009 survey of more than 1,000 institutions, 87 percent of participating colleges offered a first-year seminar (Padgett & Keup, 2011). Another study found that in the 2009–10 academic year, nearly half of first-year college students took a course intended to orient them to college life or college academics (Higher Education Research Institute, 2011). However, despite the popularity of College 101 courses, many questions about their implementation and outcomes have not been thoroughly addressed. For instance: What policies govern them, and how are they implemented on campuses? What do staff, faculty, and students say about their usefulness? How can they be improved in order to promote student success in college? Given the national dialogue on the subject of low college completion rates (see Bill & Melinda Gates Foundation, n.d.; Lumina Foundation, 2011; McPhail, 2011; Obama, 2009), this last question has particular urgency.

To answer these questions, we investigated College 101 courses at three community colleges in Virginia. We were particularly interested in understanding how policy and implementation decisions influenced students' experiences in and potential outcomes from College 101. Interviews with nearly 170 staff members, faculty members, and students, supplemented with observations of nearly 20 course sections, revealed that College 101 courses were widely supported and deemed effective by most stakeholders.

However, contextual factors made implementation challenging and undermined the courses' potential to generate long-lasting impacts. Furthermore, although College 101 courses provided students with important information, they did not offer opportunities for in-depth exploration and skill-building practice. These findings may help to explain why some quantitative evidence suggests that College 101 courses do not have long-lasting impacts (Boudreau & Kromrey, 1994; Rutschow, Cullinan, & Welbeck, 2012; Weiss, Brock, Sommo, Rudd, & Turner, 2011).

We hypothesize that in order to progress toward long-term college success, students must be able to apply the skills and knowledge they acquire in College 101 to new situations. Program implementation choices—influenced by policy and structural contexts—may limit curricular and pedagogical opportunities to develop students' ability to apply their skills in new contexts. This reduces the ability of College 101 courses to generate long-term impacts on student success.

## **2. Background**

### **2.1 The Need to Improve Postsecondary Success**

Increasing the number of young people who attain postsecondary credentials has become one of the primary educational foci of the 2010s (see, e.g., Bill & Melinda Gates Foundation, n.d.; Lumina Foundation, 2011; Obama, 2009). Low rates of student success in college have been well documented, and many students drop out in their first or second semesters (Aud et al., 2011; Provasnik & Planty, 2008). Though students' poor academic preparation is frequently cited as a cause for low graduation rates (Aud et al., 2011; Bailey, Jeong, & Cho, 2010; Calcagno & Long, 2008; Roksa, Jenkins, Jaggars, Zeidenberg, & Cho, 2009), even students who are ostensibly academically prepared often struggle to persist in college (Roksa et al., 2009).

Successful college transitions require more than academic skills. New college students must learn to navigate a complex system of bureaucratic requirements, learn new study habits and time management strategies, and engage in new kinds of social relationships, among other things (Attinasi, 1989; Collier & Morgan, 2008; Conley, 2010; Dickie & Farrell, 1991; Karp & Bork, 2012; Rosenbaum, Deil-Amen, & Person,

2006; Scott-Clayton, 2011; Shields, 2002). Students who lack these nonacademic skills are unlikely to be successful in college, even if they have the required academic skills.

## **2.2 College 101 Courses**

College 101 courses, which help students to develop nonacademic skills and knowledge, have the potential to help increase student persistence and credential attainment. These courses vary in their structure and focus. Barefoot and Fidler (1992) identify five types of freshman seminars. The most common, and the type we focus on in this paper, is the extended orientation seminar, which introduces students to campus resources and college readiness skills such as time management and note taking. According to a 2009 survey by the National Resource Center for the First Year Experience (Padgett & Keup, 2011), over 41 percent of participating colleges offered this type of College 101 course. The other types of seminars, particularly those focusing on intellectual development, appear to be more common at four-year institutions.

The research literature generally suggests that there is an association between participation in these courses and a range of positive outcomes. For example, using a matched comparison group design, Schnell and Doetkott (2003) and Boudreau and Kromrey (1994) examined student success courses in four-year institutions and found significantly greater multi-year retention for participants than for similar nonparticipants. Boudreau and Kromrey also found a positive relationship between completion of a student success course and academic performance. Strumpf and Hunt (1993) used a randomized approach and found that students who took a freshman orientation course at a four-year college had higher rates of retention in good standing (with a grade point average of 2.0 or higher) than comparison students over four semesters. Recent larger scale correlational and quasi-experimental studies have also found positive results (Cho & Karp, 2012; Yamasaki, 2010; Zeidenberg, Jenkins, & Calcagno, 2007). Analyses of large cohorts of students from Florida, Virginia, and North Carolina found that students who enrolled in College 101 courses, as compared with similar peers who did not, were more likely to persist in college and, in some cases, more likely to earn an associate degree or transfer.

Random assignment studies—which are able to attribute causality to course participation—have found more limited support for the association between College 101

courses and positive outcomes. Two random assignment studies of student success courses—one for students on academic probation and the other for incoming freshmen—found that participation was related to positive short-term outcomes, including credit accrual and grade point average (Scrivener, Sommo, & Collado, 2009; Weiss et al., 2011). Another random assignment study of a student success course that targeted developmental education students found impacts on student motivation, self-concept, and commitment to college but not on academic outcomes (Rutschow et al., 2012). However, unlike the correlational studies described above, random assignment studies of College 101 course participation have found little evidence of long-term impacts. The early gains shown by participants disappeared over time, such that treatment and control students had similar long-term outcomes, particularly in terms of graduation and transfer rates (Weiss et al., 2011; Rutschow et al., 2012). A few other, less rigorous studies also found diminishing effects from College 101 participation. The positive short-term results found by Boudreau and Kromrey (1994), for example, did not translate into improved graduation rates.

To influence college completion rates, the impacts of College 101 courses must be sustained. Understanding how these courses are implemented and how they could be optimized could help institutions to improve their College 101 offerings such that the short-term gains generated by these courses are sustained by students over time. This study contributes to the literature by investigating why College 101 courses have generally been found to have diminishing effects on participants' academic outcomes.

### **2.3 Theory of Action for College 101 Courses**

The previous literature on College 101 courses has not produced a clear theory of action explaining why College 101 courses should improve student outcomes. A theory of action grounds an intervention or approach and provides a framework for understanding why it might lead to the outcomes it is presumed to promote. Most literature on College 101 courses connects potential course outcomes to traditional higher education theories (Bean & Metzner, 1985; Tinto, 1993; Pascarella & Terenzini, 2005), implying that participation in College 101 increases student integration<sup>1</sup> and attachment

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<sup>1</sup> Tinto (1993) defines integration as a process whereby students develop academic and social connections to college.



to college by helping them develop relationships and institutional knowledge. The underlying assumption is that helping students develop college-based relationships and a familiarity with the college campus and services will help students become integrated into the institution and, ultimately, persist.

We have developed a theory of action that extends this traditional approach to explain why and how College 101 courses might influence students' longer-term outcomes. We conceive of these courses as, ideally, moving beyond relationship-building and information-giving toward providing a deeper learning experience. Well-implemented College 101 courses give students the opportunity to learn and practice the skills and habits necessary for college success. We posit that College 101 courses can help improve students' long-term outcomes if they help students learn to apply their course-related skills and knowledge. For example, knowing that the college has a tutoring center is only useful if a student also knows when and how to access the center. Many of the skills covered in College 101 courses, such as how to transfer to a four-year institution, are relevant later in students' college careers. These courses cannot have their full impact if students do not develop the ability to return to these skills and use them later.

Our theory of action is informed by learning theory and developmental psychology, which suggest that the transfer and application of skills and knowledge are rarely achieved through mere exposure or rote memorization; rather, they are generated via pedagogies that allow for deep engagement with, application of, and practice of new knowledge and skills, as well as the development of the metacognitive awareness necessary for problem-solving (Bransford, Brown, & Cocking, 2000; Bransford & Stein, 1993; Davidson, Deuser, & Sternberg, 1994; Ericsson, Krampe, & Tesch-Römer, 1993; Flavell, 1979; Hiebert & Grouws, 2007; Perin & Hare, 2010; Singley & Anderson, 1989). Learning theory emphasizes that application is distinct from other learning processes in that information is unlikely to be internalized for future use unless students are given context, connection, and opportunities for practice (Bransford et al., 2000; Erickson et al., 1993).

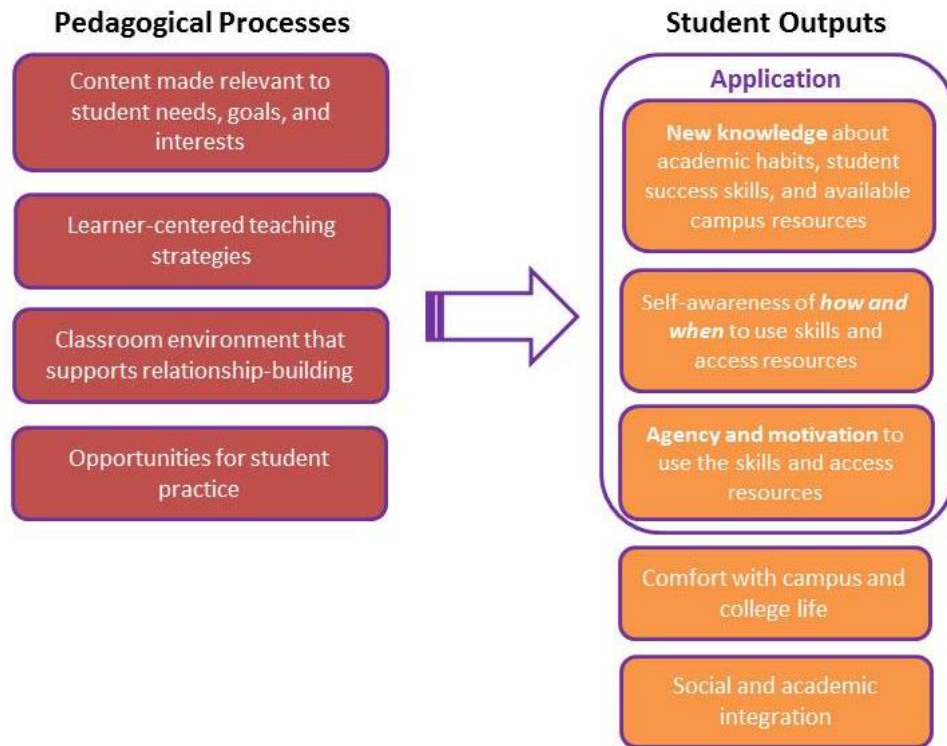
We use the word *application* to refer to the use of learned information or skills in a new setting or situation. With success courses, application entails using course content, such as note taking or study skills, in other courses; accessing student services,

such as tutoring and library services; or accessing information through a student, staff member, or faculty member introduced through the student success course. Students must have the ability to self-assess, recognize when they need to use a skill or engage in a behavior, and understand how to do so appropriately. Our theory of action assumes that effective College 101 courses help students generate a set of strategies, skills, and resources that can be used and built upon to further their academic success and also help them learn how to use those tools effectively in classes and situations across their academic careers. Students should optimally be able to apply course content to new settings and situations.

Figure 1 illustrates how the College 101 classroom environment and certain pedagogical approaches (which we call *teaching-for-application*) can help students develop knowledge and skills that will be useful in future academic endeavors. The bottom two outcomes, comfort with the college campus and social and academic integration, are the two outcomes assumed by most College 101 theories of action. The top three outcomes, circled in purple, are the outcomes that our theory assumes lead to longer term impacts, which we refer to as *learning-for-application*. College 101 courses, when optimized, develop three facets of student learning: knowledge of what skills are required and what services are available to support success; self-awareness regarding when and how to access services; and the agency and motivation to independently and appropriately use services and knowledge. Well-implemented College 101 courses are uniquely suited to developing these three types of learning, given their immediately applicable and easily contextualized course content.

If College 101 courses focus on information exchange or relationship development without paying attention to learning-for-application, students are unlikely to develop skills that can be used later. The data presented in this paper indicate that, all too frequently and for a variety of contextual reasons, College 101 courses focus on information exchange rather than teaching for application. Thus, it is not surprising that the overall impact of these courses is not long-lasting.

**Figure 1**  
**Theory of Action for an Optimized College 101 Course**



## 2.4 College 101 Courses in Virginia

This study investigates College 101 courses offered at Virginia community colleges. Virginia was one of the first states to recognize the potential importance and influence of College 101 courses, motivating the Virginia Community College System (VCCS) to implement them more consistently across colleges. In 2009, the VCCS convened a task force composed of student services personnel from colleges across the system to examine College 101 courses, which they call student development, or SDV, courses. The task force surveyed all system colleges regarding their SDV courses and practices, reviewed system policies related to SDV, reviewed relevant literature, interviewed personnel from other states with robust SDV-like courses, and reviewed course offerings across the VCCS. At the time of the task force’s work, the 23 VCCS campuses offered a range of SDV courses. The bulk of enrollments, however, were in

three courses intended to orient new students to college.<sup>2</sup> Degree-seeking students were required to take one of these one-credit courses as a graduation requirement. These courses were the subject of task force's recommendations and our research.

The result of the task force's work was a set of 26 wide-ranging recommendations intended to improve SDV courses system-wide through changed policies and course requirements. They were approved by the system office in May 2009, and most were scheduled to be implemented over the course of the following calendar year. It is important to note that the task force made policy recommendations rather than mandates. However, the recommendations were viewed on many campuses as de facto requirements, and the colleges we visited proceeded with implementation as though many of the recommendations would ultimately be required system-wide.

An overarching theme of the task force's recommendations was increased standardization of SDV courses and student experiences. One important recommendation was to develop a set of SDV learning outcomes that reflected the overarching goal of college orientation. Many of the outcomes that were developed focused on identifying and accessing various support services ("Students will activate their college email account;" "Students will identify three offices/services that are available to them"), though some outcomes were more applied ("Students will develop an academic plan") (Virginia Community College System, 2011).

The task force gave colleges the flexibility to structure the courses according to their needs as long as they addressed the learning outcomes. The task force also set forth a set of six content areas related to the learning outcomes that must be addressed by all sections of SDV: career development/exploration; library resources/information literacy; college policies; college services; study skills; and life management, including time management and financial literacy. Colleges were permitted to determine how much relative weight to give each topic and to add topics at their own discretion.

The task force also strongly recommended that SDV courses be taken during students' first semester or first 15 credits. Despite structural constraints related to

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<sup>2</sup> These courses were SDV 100 (College Success Skills), SDV 101 (Orientation to [Specify the Discipline]), and SDV 108 (College Survival Skills). All three provided an overview of college services and policies, as well as opportunities for career and academic planning. SDV 101 had a discipline-specific focus, and SDV 108 had a stronger emphasis on self-discovery.

scheduling, space, and staffing, the colleges recognized the utility of this recommendation and began enrolling students in SDV as quickly as possible. In order to maximize the number of sections available and increase the likelihood of students taking an SDV course early in their collegiate careers, the task force also recommended that individuals holding bachelor's degrees be permitted to teach SDV (previously, a master's degree was required). Colleges were also permitted to offer SDV sections in an array of formats, including condensed and online versions, in order to increase their ability to enroll students early in their college careers.

### **3. Methods and Data**

#### **3.1 Research Questions**

The research questions that guided our analyses emerged as a result of our data collection, in which contextual influences on course implementation became apparent. They were also influenced by the quantitative evidence showing that initially positive course outcomes diminished over time and by the theory of action described in the previous section. Our research questions therefore address the structural constraints under which student success courses exist and their influence on student outcomes:

1. How are College 101 courses influenced by state and institutional policies?
2. How do institutional contexts inhibit or support the ability of College 101 courses to improve student outcomes?
3. What can practitioners learn from the course implementation experiences of others?

#### **3.2 Data Collected**

This study relies on interview, observational, and documentation data collected at three community colleges in Virginia. We worked with VCCS personnel to identify colleges that were deeply engaged with and committed to running effective SDV 101 programs. The colleges we selected were geographically and demographically diverse. Table 1 describes the sites, which are referred to by pseudonyms to maintain confidentiality.

**Table 1**  
**Site Characteristics**

Site	Location	Approximate Enrollment	Number of Campuses	Minority Students in Fall 2007 (%)	Approximate Three-Year Graduation and Transfer Rate (%)	First Semester SDV Enrollment Rate, 2007 Cohort (%)
Metro	Urban	> 15,000	Multi-campus	49	26	34
Riverview	Rural	5,000–15,000	Single-campus	37	35	67
Hillside	Suburban and rural	< 5,000	Multi-campus	14	40	64

*Note.* All data are from fall 2010 except when noted.

A three-person research team visited each college twice between October and December 2010. During the site visits, we conducted interviews with SDV instructors, students currently or recently enrolled in an SDV course, and other campus employees whose job functions related to SDV (counseling staff, student support administrators, etc.). Students were recruited via an invitation email or flyer distributed in their SDV course or by their SDV instructors. Students were compensated \$25 for their interviews; faculty and staff were not. We interviewed 72 college personnel and 97 students.<sup>3</sup>

All interviews were semi-structured and recorded for transcription.<sup>4</sup> Interviews with course administrators focused on course development and implementation, other campus services, and perceptions of course effectiveness. Interviews with SDV instructors concentrated on course content, pedagogy, and assessment, as well as the benefits of the course and how it could be improved. Campus personnel not affiliated with SDV courses were asked about general campus contexts and their knowledge and perceptions of SDV. Student interviews focused on experiences in SDV as well as the transition to college more broadly.

We observed 19 SDV course sections with various formats, using a standardized observation protocol. The protocol allowed us to capture information on course activities, student reactions, student–teacher interaction, and time spent on various topics and

<sup>3</sup> An analysis of student demographics revealed that students were representative of the general community college student population in Virginia. The students were mostly non-Latino White (68 percent) and Black (26 percent). Approximately 44 percent of students the sample were male, and 55 percent were between the ages of 18 and 20 at the time of the interview.

<sup>4</sup> Three participants declined to be recorded. In those cases, we took handwritten notes that were typed as soon after the interview as possible. These notes were analyzed using NVivo qualitative analysis software.

activities. Researchers also took a running record of the class session as field notes. Observation notes were written up as soon as possible after the observation was conducted. On each campus, we also collected SDV-related documents, including texts, course syllabi and assessments, and campus policies. Table 2 presents the data collected at each of the three sites.

**Table 2**  
**Data Collection at 3 Sites**

College	Faculty/Staff/ Administrator <sup>a</sup> Interviews	Student Interviews	Observations
Metro	24	33	6
Riverview	23	33	6
Hillside	25	31	7
Total	72	97	19

<sup>a</sup>Some individuals served multiple roles, such as staff who also taught College 101 courses.

### 3.3 Data Analysis

We analyzed interview data using NVivo qualitative analysis software. The research team developed a set of codes to analyze each transcript for a range of broad topics, including state policy, campus context and policies, course format, content and pedagogy, student experiences and identity, and perceived impact of SDV courses. Coding validity was ensured through a series of validity checks in which every tenth transcript was coded by multiple researchers. The research team also met weekly to discuss discrepancies in the coding, challenging passages, and areas of the coding scheme in need of refinement.

Upon completing the coding for the broad topics, the research team identified areas worthy of investigating in greater detail. Each team member independently generated a list of “proposition statements” (Stearns, Greene, & David, 1980; Miles & Huberman, 1994) presenting tentative findings, conclusions, or recommendations. These lists were grouped into themes and then reviewed by the team to develop a set of statements to guide our subsequent inductive analysis. We generated a second set of codes to help us further examine or substantiate the proposition statements. The research team recoded the transcripts using this fine-grained coding scheme. For example, we

recoded “assessments and assignments” with a subset of codes that captured when course activities required application or reflection and when they required only rote recall. We also conducted a series of queries to look at relationships between codes, such as how course mission relates to course content. For the fine-grained coding, validity was ensured through weekly coding meetings.

#### **4. Findings: Constraints and Implementation Choices**

Our theory of action assumes that well-implemented student success courses orient students to college, teach them useful skills, and help them learn to apply those skills by using pedagogical approaches that promote learning-for-application, such as extended time on task, deliberate practice, or contextualized learning. The theory of action also assumes that, when optimized, student success courses develop all three facets of learning-for-application, exposing students to required skills and available resources, developing their self-awareness about when to use such resources, and fostering a sense of agency that encourages the use of new knowledge. Optimized SDV courses may accomplish this by encouraging students to explore campus resources, engage with and practice a range of nonacademic skills and habits, and reflect on their goals, capabilities, and plans.

Implementation decisions at the three community colleges we studied were often constrained by policy goals and the state context, and these decisions trickled down and influenced classroom-level practices. In this section, we examine the component parts of course implementation—course format and structure, staffing, content, materials, and assessment. We also examine the policy and institutional factors that influenced institutional implementation decisions. We later build on these findings to analyze how constrained course implementation decisions influenced classroom experiences and ultimately may have influenced student outcomes.

##### **4.1 Course Format**

All three colleges in the study offered SDV in a traditional one-credit format, with class sections meeting one hour per week for the length of the entire semester. However,



state policy deliberately afforded colleges opportunity to experiment with course format, and the colleges in our study took advantage of this. The implementation of new course formats was strongly influenced by increased course enrollments and a desire to improve course quality.

In order to follow the state task force recommendation that all students enroll in SDV early in their college careers, colleges needed to find ways to increase their course enrollment capacity. As one course administrator noted, “We have expanded very rapidly in the last two years, very rapidly.” To this end, the colleges in our study experimented with condensed-format SDV courses covering the same content and meeting for the same number of hours as traditional SDV courses over a shorter time period (meeting for two hours a week for eight weeks, for example, or for three weekends). This allowed campuses to run twice as many sections, as they could run one section during the first half of the semester and another during the second half of the semester. The colleges also experimented with online courses as a way to increase course enrollment capacity.

In addition, the colleges experimented with formats that connected SDV to academic coursework, allowing for team teaching, cohort development, and the application of SDV skills. One instructor spoke positively of this approach, saying, “One of the real advantages I see to tying SDV to a learning community is that you’re able to just continuously reinforce those skills that you know they’re hearing in SDV.” The colleges also experimented with tailoring SDV offerings for specific groups of students, such as nursing students or student athletes, in order to allow for contextualization of course content. Regardless of the format, on all three campuses, SDV was offered as a one-credit course.<sup>5</sup> Table 3 shows the various course configurations at each of the three colleges.

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<sup>5</sup> The three colleges offered other student development courses, usually targeted at specific groups of students, occasionally for more than one credit. These courses were not intended to orient new students to college or subject to the task force recommendations, so they fall outside the scope of this study.

**Table 3**  
**Course Configurations**

Course Configuration	Description
Traditional	Course held for one semester, usually meeting once a week
Condensed	Course held over a short period of time (i.e., half-semester, weekend), with the same number of contact hours as a traditional course
Online	Course content delivered via internet educational courseware, such as Blackboard
Linked or paired	SDV offered in conjunction with a disciplinary course, sometimes as part of a learning community
Specialized	SDV offered for a specific group, such as students with the same major or shared interest (athletes, for example)

Full-scale experimentation with and implementation of new course formats was limited by a number of factors. Though college personnel and students indicated that linked and specialized SDV courses had the potential to improve course contextualization and learning-for-application, successful implementation of these courses was challenging. Instructors were not always able to successfully collaborate across paired courses, nor were they able to fully contextualize course content, given time constraints. Other studies of similar efforts (see, for example, Visher, Schneider, Wathington, & Collado, 2010; Visher, Weiss, Weissman, Rudd, & Wathington, 2012) also found that the faculty collaboration necessary to create strong learning communities is hard to develop, particularly in resource-constrained environments in which instructors have large course loads and little extra time.

Similarly, the large numbers of credits students were mandated to take due to accreditation and licensing requirements discouraged colleges from offering SDV for more than one credit, even though a number of stakeholders thought that this would improve student learning. This constraint was particularly acute in technical majors, which already required students to earn a substantial number of credits in order to graduate. An administrator at Riverview explained, “In all honesty, we really wanted it to be a three credit course, because it could be so easily and needs to be, but for most students they cannot do it, and stay within their limit of credits and graduate on time. They just don’t have the time and the program to fit in. So we agree on one credit, but we are pushed to do that.”

In addition, the institutional environment inhibited the professional development required to create strong alternative course-delivery mechanisms. In most cases, sites experimented with course design without paying close attention to—or having the resources to address—the faculty development required to make such experimentation work. Professional development for SDV instructors was typically limited to annual or semi-annual meetings focused on course logistics and requirements rather than the comprehensive training program that course administrators preferred.

Moreover, each course format had advantages and disadvantages for classroom processes. For example, the shorter timeframe of condensed courses made it challenging for instructors to build strong, supportive, and sustainable relationships in their classrooms. A student at Metro shared, “[I] think only meeting with her once-a-week for eight weeks limited the severity of how comfortable we felt together.” Instructors in these courses also had fewer opportunities to provide feedback to students. Offering condensed courses in the second half of the semester also meant that sometimes students received important information for acclimating to college after the point at which it may have been useful. For example, if courses cover academic planning after the registration period for the next semester has concluded, students miss the opportunity to meet with an academic counselor prior to selecting their next set of courses.

Traditional semester-long formats, on the other hand, allowed for relationship-building and sustained exposure to course content. But these course sections typically met for only 50 minutes at a time, limiting the opportunity for extended instructional activities, as one instructor explained:

But with fifty minutes you can't get anything done... By the time you get your homework, you get the roll taken, you get the questions answered, and you got the people that are behind it all, you burn up twenty minutes already. So then by the time you get started in something it's over.

Table 4 highlights the instructional tradeoffs of the two most common approaches.

Though faculty and staff respondents understood the benefits and drawbacks of various course formats, we saw no evidence that implementation decisions were driven by the implications of various formats for student learning. Instead, they appeared to be driven by the need to increase enrollment. One administrator expressed the need to meet

student demand for SDV by any means necessary, saying, “They fill up fifteen sessions and then they try to offer some more. There is only so many times of day and so many locations you can have it. And there’s just no ideal...I guess three Saturdays now is better than none at all. I guess.”

Many students were unaware that there were multiple formats or versions of SDV and, as a result, were unable to select a section that best met their needs. Students appeared to enroll in course sections haphazardly rather than deliberately. Said one student, “I didn’t even know it was just a short eight weeks until she gave us the syllabus and it explained it on there.” Thus, students who might have benefited from prolonged exposure to the course might have enrolled in a compressed version, and those who might have preferred a compressed course had they known about the option might have enrolled in an 16-week section instead.

**Table 4**  
**Course Format Tradeoffs**

	<b>Pros</b>	<b>Cons</b>
Condensed courses	<ul style="list-style-type: none"> <li>• Increased course enrollment capacity</li> <li>• Longer class periods, allowing for more creative use of class time</li> </ul>	<ul style="list-style-type: none"> <li>• Potential difficulty in building relationships</li> <li>• Potential disadvantages related to the time of semester that students take the course</li> <li>• Difficulty in identifying student needs and interests in time to contextualize course content</li> </ul>
Traditional semester courses	<ul style="list-style-type: none"> <li>• Opportunities for sustained relationships between students and with instructor</li> <li>• Opportunities for sustained practice and application of skills</li> </ul>	<ul style="list-style-type: none"> <li>• Challenges related to offering many sections</li> <li>• Shorter class periods, which may discourage student-centered pedagogies</li> </ul>

## 4.2 Staffing

Just as course format decisions were driven by the task force recommendation to enroll students in SDV as early in their college careers as possible, staffing decisions were constrained by enrollment increases and the need to staff a large number of course sections each semester. Staffing choices were almost entirely driven by the logistical demands of running enough course sections necessary to enroll all new students in the

course. Finding enough individuals to staff each section was a challenge for course administrators. One administrator stated that after years of working to add enough course sections to the college's schedule, "the issue became that we didn't really have anyone to teach" the new sections. As with course format, external constraints influenced staffing implementation. In turn, this influenced classroom-level practices and, ultimately, student experiences and potential outcomes.

To address the staffing constraints, colleges used three broad types of instructors. All colleges relied heavily on adjunct instructors. The administrator quoted above noted that to solve their staffing issue, the college's SDV course became "just about totally adjunct-driven." The colleges also relied on support services personnel, such as counselors and advisors, often requiring them to teach at least one section of SDV. Hillside Community College also required administrators from across the college to teach at least one SDV section each year.

Each staffing choice influenced what happened in the classroom. Though adjuncts tend to be knowledgeable instructors with pedagogical experience, their status as external to the college impinged upon their ability to meet SDV course goals. Often, they were unfamiliar with the college and its policies and could not help students navigate college structures and supports. One student services staff member remarked, "I mean, do they even know anything about the college they are teaching it at? You are telling students to go to Career, Employment and Transfer, but have you ever been there?" An adjunct at the same college confirmed this perception, stating, "To be quite honest with you I am only there for an hour and a half. I don't know what is going on in the daytime." In contrast, one college staff member we met with, when teaching SDV, accompanied students to the appropriate support office upon hearing a given need. Adjuncts likely have neither the time on campus nor the institutional knowledge necessary to do this.

Staffing SDV courses with regularly hired college faculty, administrators, and staff helped to overcome the isolation and disconnection of adjunct instructors. These individuals tended to be well versed in the available supports and policies of the college and could help students navigate registration activities relatively easily. Their presence on campus throughout the year provided the potential for the development of lasting

relationships with students. However, support staff and administrators who teach SDV have other responsibilities. As budgets shrink and enrollments rise, job duties often expand, leaving staff with less time to devote to teaching a course such as SDV. One administrator who taught SDV described her competing job demands and their influence on her instructional time:

I would say that given what we want for our students, [administrators as SDV instructors] may not be the best thing. And I say that with a bit of reluctance because I love teaching this course. By the same token, the demands of our position are ferocious at times... I hear consistently from other administrators that they can't deliver what they want to the students.

Moreover, although administrators are often deeply engaged in college life and can give students insight into important college functions and offer support to students after their success course is over, they are not always skilled teachers. For instance, an individual hired to work on the financial management of a college most likely would not have had any experience teaching. "The only negative is that sometimes it's not someone's skill set," an administrator stated. "So if you have someone in a position where they're hired because they have a certain skill set that maybe does not translate in a classroom..."

### **4.3 Course Content**

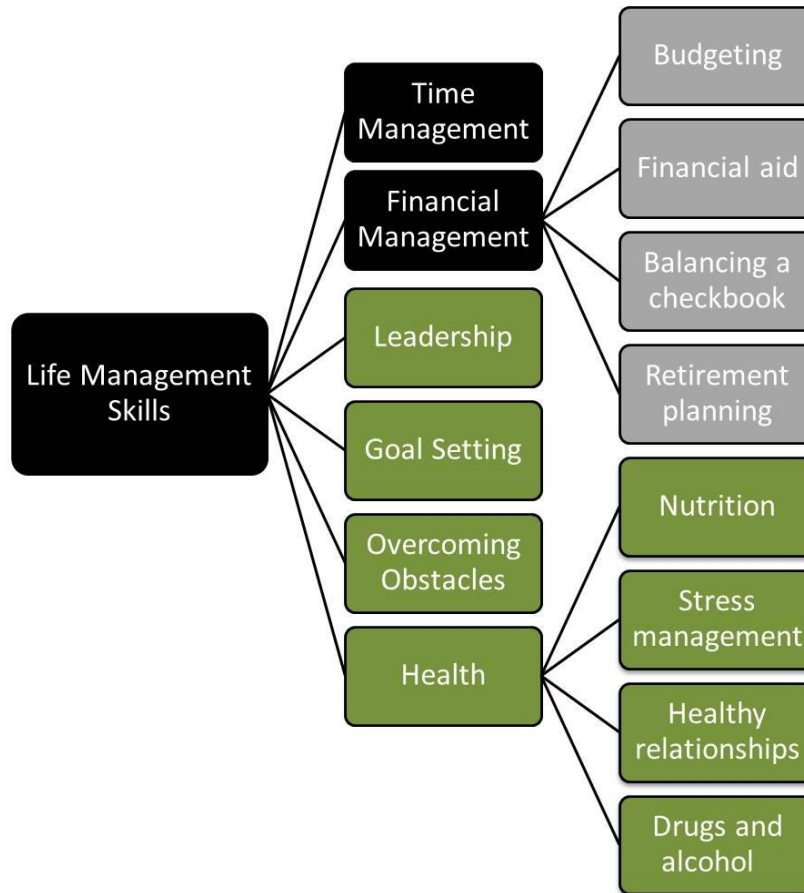
A key decision for colleges was determining what content to include in their SDV courses. The VCCS task force provided six required content areas but also permitted colleges to add content at their own discretion. At the three colleges in our sample, administrators and instructors added course content that they felt would be interesting or useful to students. As a result, SDV at each school included a broad curriculum with a large number of topic areas. Our analysis of the VCCS required content areas, course syllabi, and textbooks used at each college revealed a total of 22 potential content areas, with individual schools covering between 16 and 21 of these (see Table 5).

**Table 5**  
**Course Content**

<b>Content Area</b>	<b>Metro</b>	<b>Hillside</b>	<b>Riverview</b>
Career planning	X	X	X
College planning	X	X	X
Computer literacy	X	X	X
Critical and creative thinking	X	X	
Diversity		X	X
Elements of success	X	X	X
Ethics			X
College culture and expectations	X	X	X
Goal setting	X	X	X
Information literacy	X	X	X
Learning styles	X	X	X
Listening and note taking	X	X	X
Memory	X	X	
Money management		X	X
Reading	X	X	
Relationships	X	X	X
Speaking effectively		X	
Studying	X	X	X
Test taking	X	X	X
Time management	X	X	X
Wellness and stress		X	X
Writing effectively		X	
Total topics	16	21	17

These 22 content areas emerged in part from the breadth of the VCCS content recommendations. Colleges and instructors broke the six required topics into multiple subtopics for ease of coverage. For example, in covering the VCCS required topic of study skills, Hillside SDV courses offered information on learning styles, note taking, test taking, and memory skills. Figure 2 illustrates how a single, broad VCCS content area—life management skills—could be interpreted by a college and result in an expansive set of course content areas. The VCCS defined life management skills as “time management” and “financial literacy.” Figure 2 also shows how colleges not only interpreted financial management broadly to include several subtopics (grey) but also added a range of content not specified by the VCCS (green).

**Figure 2**  
**Topics Included Within Life Management**



*Note.* Black indicates content areas required by the VCCS; grey indicates college-generated subtopics of required content areas; green indicates additional content areas not required by the VCCS.

Another contextual factor that influenced course content was the composition of the student population at each college. Colleges took advantage of the flexibility of the task force’s recommendations to design courses that met the needs of their student populations. If a perceived need was not covered by the state-recommended curriculum, colleges typically added it to their courses on their own. For example, courses at Riverview Community College included computer literacy to serve their growing population of nontraditional students returning to school during the economic downturn, who typically had little knowledge of computers. Hillside added critical thinking and leadership to their core areas.



Most stakeholders appreciated the flexibility afforded by state policy. Students were able to find at least one content area they found engaging, and many instructors used the broad curriculum to tailor the course to the students in their section to some extent, which they felt increased the course's relevancy and students' engagement.

Explained one instructor,

One thing that's good about it is we have enough material that we can pick and choose from the material that we have and we can supplement material with stuff that we want to use. We do have our book, but if we want to give handouts from something else, we have autonomy to do what we want to do in that class.

On the other hand, the flexibility in content interpretation and implementation had implications for instruction and outcomes, as discussed in Section 5 of this report.

#### **4.4 Common Course Materials**

Although curricular flexibility allowed colleges to tailor SDV courses to student needs, it also created the potential for students to encounter different sets of content within what was ostensibly the same class. Each of the three colleges in our sample developed common course materials for their institutions in order to ensure a degree of consistency across course sections. Common course materials also eased the planning process for instructors whose other duties left them with little time to devote to the course.

Each college used a set of materials required of all institutional SDV instructors, including a required textbook, a syllabus template, and mandatory assessments and assignments. At each college, all course sections used the same final exam, standard grading policies (e.g., homework was worth 20 percent of the grade), and a set of recommended classroom activities. Hillside and Metro developed a set of learning outcomes for all of their course sections as well. Hillside also developed an instructor manual to serve as a resource for instructors with less teaching experience or little time to plan as they developed activities tied to the college's desired course learning outcomes; see Box 1 for more information.

Though standardized course materials helped to address some structural challenges, they created new ones, particularly in the classroom. Some instructors disliked having to cover certain topics or use certain materials. Others spoke negatively

about required assignments, particularly those they viewed as contrary to the purpose of the course. For example, some instructors indicated that the required multiple choice quizzes did not allow for the type of teaching-for-application SDV should encourage:

I would like to use my own quizzes instead of a quiz put together for everybody to use. I don't like to teach to the quiz; I like to teach what I think is important... And I'd like to give maybe some discussion questions where they justify or they explain or they compare. Some where critical thinking is involved.

Other instructors expressed concern that the required course materials limited flexibility, preventing them from meeting the particular needs of the students in their section.

#### **4.5 Summary of Findings**

Across all areas of implementation, our analysis indicated that external and non-pedagogical constraints strongly influenced course structure and delivery. Notably, implementation decisions were often made in order to meet noninstructional priorities, such as increasing course enrollment. These implementation decisions regarding SDV format, staffing, content, and materials presented a variety of advantages and disadvantages. Moreover, the implementation decisions made at the college level influenced what happened in the classroom, creating new constraints on instruction. In the next section, we examine how macro-level constraints and implementation choices influenced classroom-level processes, paying particular attention to how implementation could inadvertently limit teaching-for-application and students' ability to gain course knowledge that could be used throughout their college careers.

**Box 1**  
**A Promising Approach to Standardization Tensions**

To what extent should course materials be standardized? Although there are many benefits of allowing instructors flexibility and autonomy, too much autonomy can lead instructors to rely only on their own opinions and experiences about which content to cover, in which case students may miss content that is important to their success. In addition, too much flexibility can leave instructors feeling overwhelmed and present additional challenges for those with less training in instructional methods.

Hillside Community College developed an instructor manual that mitigated some of these tensions. This manual identified the 10 core content areas that must be covered in each section of the course. Within each content area, the manual provided three possible activities or instructional approaches, allowing for instructor choice. Activities in the manual were largely interactive and designed to allow students to make connections between course content and their lives. As a result, instructors with less teaching experience had access to more creative instructional approaches. Likewise, teachers with other demanding job responsibilities could develop a plan for class quickly and easily. One instructor stated:

We do have the handbook that has a bunch of suggested activities and articles and that kind of thing. And I do take a lot of the activities from there because there's a lot of really good things in there. Even if I don't do exactly what they wanted, at least here's something to think about and it gets you kind of moving around the room and that kind of stuff.

Though the manual did not entirely mitigate instructor concerns, particularly regarding the time necessary to plan for and cover a large amount of curriculum, it was seen as an important and useful tool.

## **5. Analysis: Unintended Consequences of Implementation Choices**

The implementation decisions highlighted in the previous section were generally made at the state or institutional level, but they were acutely felt in the classroom and influenced decisions made by course instructors. They also influenced how non-SDV faculty, staff, and students perceived the course. Our theory of action presumes that effective student success courses provide students with access to information, contextualized opportunities for practicing new skills, and the development of self-awareness and agency. Our analyses found that contextual influences and implementation choices limited the opportunity for such learning, particularly in two areas strongly influenced by macro-level implementation decisions: (1) perceptions of course value and legitimacy and (2) classroom instruction and pedagogy.

### **5.1 Perceptions of Course Value and Legitimacy**

The way a course is implemented makes visible to those not directly involved what the course is about and why it is important. The SDV implementation choices made at the three colleges—such as the one-credit status of the course—implied, albeit unintentionally, that the course was not an integral part of the college’s academic enterprise. As a result, individuals not directly involved in SDV were unclear of the course’s purpose or value. Students also had varying interpretations of the course, its goals, and its value, largely depending upon in which section they enrolled. The result was a muddled notion of SDV that devalued the course at the colleges and diminished the likelihood of non-SDV course instructors reinforcing or providing opportunities for students to practice their SDV-related learning.

The subordinate nature of the course was evident in a range of comments from all types of stakeholders. Students expressed this when they described their initial reactions to having to register for SDV. When asked to describe her initial reaction to enrolling in the course, one student said, “Well a lot of people were like, ‘Oh that’s an easy A.’ It’s kind of a waste of time. You go up and they tell you stuff that you should already know.” Another student told us,

Even before I actually enrolled in it, I figured it was probably going to be drawn out and boring, honestly. Because I was like,

college success skills—this is going to be do this, don't do that, this is how you study, this is how you are a good student. So, from the get-go even before I started taking it I figured it was probably going to be excruciatingly boring and slightly pointless.

Although most students ultimately came to value SDV, their initial reactions reveal an overarching sense among those with little experience with the course that it may not be important or worthwhile.

Faculty not involved in the SDV course expressed similar sentiments. Throughout the colleges we visited, there was a clear disconnect between academic faculty and SDV instructors. Some academic faculty indicated that they did not view SDV as important, valuable, or useful. However, in the same breath, they noted that they did not know much about the course. One administrator told us, “The perception of [SDV], I think, that many faculty members have is. ‘Oh well that course is not that important. It’s pretty easy.’”

The perception of SDV as a less important or less legitimate college course came from a number of sources. One key influence was the course’s affiliation with the student support side of the college rather than the academic side. At all three sites, SDV was overseen by student services administrators. Moreover, though taught by a variety of individuals, counselors and advisors were most deeply involved in teaching the course. This contributed to the common perception that SDV was not rooted in a discipline, not truly academic, and not collegiate. Its affiliation with student services also meant that SDV was often disconnected from the academic life of the college. The schism between SDV and the broader intellectual project of the college further contributed to the devaluing of the course. Most faculty who did not teach SDV were only peripherally aware of the course and its goals; without a clear understanding of how SDV might improve student outcomes, they tended to assume it was ineffective.

SDV faculty and administrators were aware of this issue and frequently mentioned that the course was misunderstood by academic faculty. One SDV instructor understood this viewpoint, saying, “Because I can see, if I’m teaching organic chemistry, do I think SDV is important? No.” An administrator emphasized the need to improve awareness of SDV and its potential impact:

The faculty didn't understand and the administrators just didn't know enough about the course... I think someone needs to drive

that same boat on the instruction and learning side of the house... We have to get them to be partners to go, “this is important”... we need to co-own it.

In absence of knowledge about the course, faculty members and new students based their perceptions of SDV’s value on easily visible course features: its one-credit status, its broad course content, and the “fun” activities in which sections often engaged. Stakeholders frequently noted that the decision to offer the course for one credit—a choice rooted in practical considerations and program constraints—undermined their attempts to convince others that SDV is a valid and valuable academic experience. One administrator, from Hillside Community College, told us that the one-credit status of the course encouraged students to see it as a “hoop to jump through” rather than something important. A student at the same college concurred, saying, “My personal opinion is that it should be a humanities elective... then that SDV class could actually go towards my degree, towards my major.”

The wide-ranging content of SDV courses led to further confusion. VCCS required course content was expanded by colleges and individual instructors, resulting in a crowded, diffuse set of topic areas covered in a relatively short period of time. Instructors and students appreciated the broad content, which allowed “something for everyone” and for the tailoring of the course to student needs. From an outsiders’ perspective, however, the large number and varying type of topics included in a single course was confusing, as it appeared that there was no central set of objectives. Those not involved with the course were unable to identify what students were supposed to be learning as a result of their enrollment. An administrator at Riverview was cognizant of this problem and viewed a “real danger for [this type of] course... it’s like trying to be all things for everybody and it really does end up not being anything to anybody.”

Without a strong curricular focus, SDV staff and instructors had difficulty presenting the value of their course to those not directly involved. Moreover, outside faculty were unable to reinforce SDV concepts in their own classes because they did not know what content SDV courses typically included. Said one, “I have seen an outline in the past and I don’t think I have looked at one recently. I think there are some... like the

time management skills, and I would be really fumbling to say that I know what the current outline looks like.”

In addition, faculty and students alike often felt that the topics covered in SDV were unimportant and not worthy of being taken seriously. Students were tempted to discount their SDV-related learning, at least at first. One student described the course’s content thusly: “Use flashcards. How to set up a chart. Things like that we have been working on all through high school and all through middle school.”

Overall, the one-credit status of SDV, its broadly defined and packed curriculum, and its seemingly nonacademic aspects exacerbated the disconnect between SDV and the wider academic life of the college and undermined its perceived value. Students were sometimes initially reluctant to enroll in SDV because they thought the course would not benefit them. Academic faculty did not know about—and did not deem it important to know about—the skills developed by students in SDV courses, and thus were unable to connect the courses’ content to their own disciplines. Ultimately, SDV was often viewed as ancillary to key collegiate activities rather than as an integral part of promoting student success. As we discuss later, when SDV course content is not viewed as important or relevant to student success, potential course outcomes are muted.

## **5.2 Pedagogical Choices**

Perhaps the area in which implementation constraints and related decisions had the greatest influence was the area of classroom instruction. In this section, we focus on the pedagogical choices made by instructors and how they were influenced by macro-level decisions, such as the course’s one-credit status, the use of standardized course materials and assessments, and the location of the course in student services rather than academic affairs.

We observed 19 course meetings and saw numerous instances of teacher-centered, lecture-based pedagogies. In our interviews, many instructors confirmed that they often lectured to their students rather than engaging in student-centered, interactive, or exploration-based activities. For example, in the courses we observed, instructors often reviewed worksheets or material from the textbook. Although most classes we observed were not strictly lecture-based, they were predominantly teacher-led. Instructors generally asked students for answers to questions posed in the textbook, workbook, or

presentation slides, and students rarely offered unsolicited ideas or opinions.

Occasionally, we saw students working in pairs or groups to complete activities, but the activities most often required students to recall information from a textbook rather than practice or apply new skills.

The pedagogical styles we observed did not resemble the teaching-for-application described in our theory of action. Teaching-for-application requires creating opportunities for sustained engagement with course content, guided practice, and contextualization. The theory of action also presumes that SDV, which has content that is potentially relevant to students' personal lives, goals, and interests, would be well suited for such pedagogies. However, a confluence of implementation decisions led to the predominance of lecture-based pedagogies in SDV classrooms.

One of the primary obstacles to teaching-for-application was the course's one-credit status, which led to a relatively small number of contact hours to cover the wide-ranging curriculum. Balancing curricular requirements with time constraints was a serious concern for course instructors. One instructor described the pedagogical predicament by saying, "Okay, I only have 90 minutes but I have 22 take-aways. How am I going to get this? One minute per take away!" Another echoed this sentiment, saying, "There's not enough time to deliver the content we're expected to deliver; not in any meaningful way. Students don't have time to really engage either with the professor or the content or at least we haven't found a way that might be an option to." Standardized assessments and assignments only exacerbated this tension. Instructors felt that they could not eliminate topics in order to spend more time on others, despite the detrimental effects that rushing through course content had on depth of learning. One instructor described having to cover "a little bit of health and wellness, just to make sure that it's covered and they are prepared for the final exam."

Lecture, or lecture coupled with question-and-answer, was viewed by many instructors as an expedient, if not ideal, instructional format. They indicated that lecture allowed them to be certain that all required content was covered: "Not that you want to necessarily want to read the textbook to them in class all the time, but you do want them to get the material." In many cases, ensuring that students "get the material" involved using methods that focused on breadth of coverage rather than the depth of learning



assumed by our theory of action and that learning theory suggests is required to develop students' ability to apply new knowledge and skills.

From the students' perspective, this approach appeared to be what Grubb (2006) calls an "information dump," in which they were told about information and services quickly and briefly. When asked about student services discussed in the course, many students described receiving a list of available resources. There was limited discussion of these services beyond their existence and basic function. Students were not assisted in figuring out when or how to use the services. From a learning theory perspective, this type of rapid and didactic presentation of knowledge is counterproductive because it inhibits deep learning. Singley and Anderson (1989) and Bransford et al. (2000) argue that students need time to organize, make sense of, and develop an in-depth understanding of the content they are being asked to learn, which cannot happen when many topics are covered in quick succession. "Packing in" course content, though logical from the perspective of trying to quickly give students as much information as possible, may hinder students from applying this knowledge throughout their college careers.

A second constraint inhibiting teaching-for-application in many of the courses we observed was the colleges' use of standardized course materials to ensure consistency across course sections and types of instructors. These materials frequently discouraged teaching-for-application; many of the materials we saw or heard about focused on superficial coverage of course content. For example, students at Riverview Community College were required to complete a series of worksheets that were essentially check-off lists. Students were asked, for example, to identify which of a long list of statements they preferred ("Teacher pays attention to me"; "Getting on the honor roll"; "Helping other students") in order to determine if they were internally or externally motivated.

Because these activities had to be completed, instructors spent time on them rather than on group discussions or other activities that might promote reflection and interaction. In fact, many instructors viewed these required assignments as something to "get through" and rushed accordingly. In one class we observed, for example, students were given 10 minutes to complete a financial management activity in which they learned to balance a checkbook, after which the instructor began discussing an entirely new topic without having students reflect upon or analyze their experience with the checkbook

activity. Such rushed and superficial coverage is contradictory to the approaches, such as deliberate practice (see Ericsson et al., 1993), that lead to learning-for-application and require time to practice, reflect, and receive critical feedback upon student performance. Although the activities encouraged via standardization imparted information, they did not structure practice of skills or encourage instructors to spend significant amounts of time teaching the content. Eliminating such surface-skimming activities could potentially create time for more in-depth learning.

The decision to locate SDV in student affairs, rather than on the academic side of the college, further limited the use of teaching-for-application. Few academic faculty knew specific details about SDV course goals or content, and even fewer had the opportunity to teach the course themselves. Because academic faculty were unaware of what was taught in the course, they could not reinforce the skills and knowledge taught in SDV in their own courses. Conversely, many SDV instructors did not teach academic courses and so were unable to contextualize SDV course content.

We found few instances in which students were explicitly asked to apply their student success course learning to academic courses, though this might have been due to the fact that our interviews were conducted early in students' college careers. A tutoring center staff member noted that students did not often use the note taking skills discussed in SDV in their other courses because the importance of those skills was not reinforced:

But I think if there was some carry over or more practice [of SDV skills] that those things would come into practice... If it could be brought over to where they are actually using it in a content area course, then they see the purpose of it. When it's still separated into the SDV, students are [less likely to understand the importance of those skills].

Learning theory purports that when new information is made relevant for students—such as when it is connected to an academic course or a career goal—the likelihood of application is increased (Berns & Ericsson, 2001; Perin & Hare, 2010). But SDV course content, in its disconnection from academics, was often decontextualized. Students were rarely asked by their SDV instructor or their academic instructors to use their SDV-developed skills and knowledge in other courses. Separating SDV from the

broader academic life of the college by locating it in student affairs may have inadvertently inhibited this type of application.

It should be noted that we saw and heard about instances of teaching-for-application in specific course sections (see Box 2 for an example of a classroom activity that promoted application). Some course formats allowed for sustained engagement with course content, as when learning community students were asked to use an SDV skill in their academic paired course. All three colleges in our study emphasized time management, a topic that seemed to encourage learning-for-application, perhaps because students found it immediately relevant, useful, and applicable outside of the SDV course. Many of the activities in Hillside's instructor manual asked students to make connections to their personal lives or academic goals. Some individual instructors also moved beyond lecture, usually because they were skilled teachers who were able to navigate the dense course content and make it meaningful to students or were confident enough in their own teaching to feel that they did not need to lecture.

Overall, though, most course sections we observed were influenced by the structural constraints presented by the broader implementation of SDV—one-credit status, packed course content, and separation from academics. This resulted in more lecture and less student interaction than predicted by our theory of action. The potential implications of this for course outcomes are discussed in the next section.

**Box 2**  
**Using Practice to Teach-for-Application**

To promote application, instructors must give students opportunities to practice skills that are relevant to their college needs, goals, and interests. Such opportunities were often absent in the course sections we observed and heard about. For example, we saw a classroom in which students worked independently to complete a survey related to their physical, emotional, and intellectual health. The worksheet asked students to reflect on their personal lives, but there were no opportunities during the class to make the activity relevant to students' needs or goals. Likewise, although the instructor explained to students that multiple dimensions of health are important, students had no opportunity to apply to their self-assessment to a skill or practice useful for college success.

Teaching-for-application did occur in some classrooms, however, and these instances may serve as examples of what could be achieved in an optimized SDV course. In one section customized for students planning to transfer, a major course assignment was to complete an application to a four-year college. In the session we observed, the instructor used an LCD projector to model filling out an application for a local university. She projected the website of a local university that several students in the class had expressed interest in attending, demonstrated how to navigate to the online application, and highlighted the types of information the college requested. Students' applications were due for a course grade the following week, and they were engaged in the lesson, asking questions about the application and the accompanying essay. Given that stakeholders report that the process of transferring to a four-year college is complex, this activity helps to meet students' college needs. The instructor advised students to complete the application for a college they may want to attend; thus, this assignment was directly relevant to students' interests and goals while allowing them time to practice the skills covered in class.

## **6. Analysis: The Paucity of Long-Term Outcomes Revisited**

We argued earlier that College 101 courses have the potential to improve students' long-term outcomes if they help students learn to apply their course-related skills and knowledge, but quantitative research indicates that this potential has not been realized. The data presented in this paper provide a possible explanation as to why College 101 courses have not, thus far, increased degree attainment. Our theory of action, built upon learning theory, contends that College 101 courses lead to application if they address three facets of learning-for-application: exposure to new knowledge of required skills and available services; self-awareness allowing for an understanding of when and how to use new skills and knowledge; and opportunity to develop the agency and motivation to act upon needs. We found that contextual constraints influenced course implementation and instruction at the three colleges we studied, such that pedagogies that encourage learning-for-application were inhibited.

Students reported little application of their SDV knowledge to other situations, and college staff and instructors reported that they rarely encouraged such application outside of SDV. Therefore, it is not surprising that long-term outcomes were not realized. We cannot establish a causal link between our findings and such outcomes, but in this section, we demonstrate that, according to students and their instructors, students did not complete SDV courses with significantly improved ability to use student success-related skills and knowledge. Our theory of action predicts that, without the ability to apply this knowledge, long-term outcomes will not accrue.

Our data are limited by the fact that our interviews were conducted during the same semester in which students took their SDV courses, early in their college careers. Nonetheless, student interviews combined with instructor reports enabled an initial investigation into whether SDV, as implemented on the three campuses, was optimized to allow for application of course content. The data indicate that SDV courses at our three colleges generally succeeded at encouraging the first facet of learning-for-application—providing students with new information and exposing them to potentially new and useful skills. They were less successful at promoting the second and third aspects of learning-for-application—developing self-awareness and gaining agency.

## **6.1 Acquiring New Knowledge**

For the most part, the students with whom we spoke increased their basic knowledge of college services and college success skills via their participation in SDV. They knew what services were available and, at least in the abstract, when a student might want to access those services. This reflects the knowledge- and information-focused learning outcomes for the course set forth by the VCCS.

The students we spoke with gained general information about college and college expectations through their SDV experiences. They knew that tutoring services were available, for example, or that they should see an advisor for help with course scheduling. They understood that independently taking notes is important in college, as are time management skills. Some representative comments from students reflecting this knowledge included the following:

I've always had trouble with note-taking and the teacher explained it and he actually showed us.

She showed us the different tools, how to use them and how to get to your classes and things like that.

[In SDV] we go over time management, study skills, test skills, stress, relationships, diversity, classes that we take... We went over all of that to make sure we are taking the right courses for us. We cover who to talk to... We went over the buildings so that we could get familiar with the campus. We have a library tour, just everything to familiarize us with the school and what's going on.

## **6.2 Developing Self-Awareness**

Students in our sample often had unclear notions about when and how to apply the knowledge they learned in their student success course. Some students indicated that they did not see the utility of a given skill or service and did not think they would need to use it. Other students did not know how to access or use their new knowledge, even if they knew it would be useful.

Students who did not see the utility of SDV-related skills and knowledge were unlikely to develop the recognition that such skills could be useful to them. Importantly, they thought that because their SDV-related learning was not useful to them immediately, it would not ever be useful. Many of the students in this group entered college with

strong academic backgrounds and found relatively easy success in their initial college courses. Because their old academic approaches were still serving them well, they did not see the utility in learning new approaches to studying or note taking.

One student described her study habits: “I just kind of do it my way, just stare at it until it sticks. It works. I got an 85 on my first test.” Though this student was confident that her approach met her current academic demands, she did not recognize that staring at a textbook or set of notes may not always lead to academic success. Without the self-awareness to recognize that the academic habits taught in SDV might be useful later, she appeared unlikely to internalize those study skills in such a way that she could access them when they were needed in future courses.

Some high-achieving and well-prepared students may never need to change their academic habits or access supports to succeed in college. Most students, though, are likely to experience at least some academic difficulty over the course of their collegiate careers. Anticipating such challenges and understanding how the skills and knowledge gained in SDV can be used to overcome them may help students to achieve long-term success.

A second group of students in our dataset demonstrated genuine confusion about when, why, and how to use the services and skills addressed in their SDV courses. Though they had a vague sense that the knowledge gained in their SDV courses could help them, they had not developed the self-awareness needed to know when and how to put this knowledge into practice. For example, although most students knew that tutoring services existed, few indicated that they knew when to go to tutoring. Many noted that they might need to access the tutoring services in the future, but they could not articulate how they would know it was an appropriate time to utilize tutoring services.

One student succinctly illustrated the lack of know-how among many of the students in our sample, stating, “I really don’t understand... there’s a place that I can go for job placement or something like that. I know that these things are out there, but I really don’t know how to utilize them.” Similarly, although students indicated that they knew developing relationships on campus was important, they did not understand how to use the relationships developed in SDV to further their college success.

SDV courses have the potential to help students develop self-awareness and understanding of when and how to use new skills through applied assignments (see Box 3

for a description of how some SDV course sections—but not others—helped students learn how to apply their knowledge of campus services). At the three colleges we studied, application was, in general, not optimized, but we found that students were more aware of when and how to use new skills than they were aware of when and how to access services or relationships. This was particularly true for skills such as time management and note taking, as well as basic information such as how to access student information systems and other resources that were more likely to be concrete and immediately useful. For example, one student stated, “[Blackboard and other technology] was all new to me and now because of [my SDV instructor], I can log onto my college email account and I can go to Blackboard and pull up what I need and get what I need.”

Compared with information about services and relationships, new skills are also easier to teach in an applied manner. For example, it is relatively easy to give students the opportunity to practice time management through a scheduling exercise, whereas it is more challenging to demonstrate why they may need to access the college’s transfer center in the future. One student, for example, described learning note taking in SDV via an applied exercise, saying, “And he actually sent us to a fall convocation to take notes and then he would go over it and kind of help us with what we did and what we didn’t do to try to get a better understanding of how to take notes.” This student noted that she began to use similar note taking techniques in her anatomy course.

In contrast, the utility of many services and relationships remained somewhat abstract. For example, the concept of transfer and employment services was new to most students, so they did not know what services at these offices would entail. Additionally, students perceived (often incorrectly) that they would not need to investigate transferring or job hunting for a number of months or years, so the services and people related to those processes were not seen as immediately useful.

### **6.3 Gaining Agency**

Instructors emphasized that the aspect of learning-for-application involving gaining a sense of agency, or the motivation to actually use one’s newly gained knowledge and skills, was missing for many students. According to one instructor, some students “have been told ‘it’s all your fault’ [when they fail], but they haven’t been given the tools [to be successful]. So from that standpoint, I think the most important thing that



we do is to give students a sense of their own agency and show them how to exercise agency to do well.” Despite its importance, this facet of learning was the one least likely to be developed in the SDV courses we examined. In discussing their SDV experiences, students indicated that they were passive consumers—rather than active users—of course content. Many indicated that they did not and likely would not use what they learned in the class in the future, even when they saw the utility of doing so. They rarely took the initiative to use their SDV-related learning, building upon it only when explicitly asked to do so by others. One student epitomized this lack of agency found within our sample when discussing her unwillingness to seek help: “I don’t really want to admit that I need help learning something, until it’s absolutely like I have to do it. When I’m sitting in class and I don’t know anything that’s on that test.” This student knew that help was available and would be useful but was unlikely to take advantage of such assistance unless the situation was dire.

Instructors indicated that students were typically passive rather than active users of supports and new knowledge. One Riverview instructor told us, “If I write on one of their papers, particularly English writing, ‘You need to see a tutor’ then they will generally seek out a tutor. But I have to literally have to put it in writing and say ‘You need to at least see a tutor before your next paper to learn this format.’” It appears that although SDV is intended to develop students’ knowledge and ability to use and access services, the students do not do so on their own.

### Box 3

#### A Case Study of Varied Application: Library Resources

One illustrative example of the application process that emerged in our analysis was teaching about library resources. There was a startling difference in the use of library resources at Hillside, where students reported using them for research papers relatively frequently, compared with Metro and Riverview. Metro and Riverview students typically used the library as a “quiet place to study.” Unlike the other two schools, SDV sections at Hillside introduced the library via an applied assignment. The student success instructor who developed this assignment noted that “a lot of the students that are coming in directly from high school at least didn’t have to really write research papers and so they never really were forced to think about the information and to use it in an academic setting.” To address this, the instructor developed a research paper assignment that required a visit to the library to compile information from reference materials. This assignment exposed students to the type of papers for which they might be expected to do research and include references.

Hillside students often commented that learning about the library “was really useful, too, because, not so much now, but eventually we probably will need to learn how to use the library.” Without an awareness of the research expectations for papers in college, students saw limited application of the library to their current coursework. The applied assignment provided a hands-on example of the type of work that would require library resources. In comparison, students at both Metro and Riverview gained only the knowledge that the college had a library; they lacked insight into how they might use the library in the future. Approaches to library instructions at each college are outlined in the table below.

	<b>Metro</b>	<b>Riverview</b>	<b>Hillside</b>
How the library was introduced	Online tutorial on library resources	Tour of library conducted by a librarian	Tour of library conducted by a librarian
Assignment associated with library	Quiz	Quiz	Research paper requiring a visit to the library to compile information from references
Overall use of library for research amongst student interviewees	Low	Low	Moderate

## 7. Discussion

In this paper, we examined College 101 courses in Virginia, where they are referred to as student development courses, or SDV. We sought to understand implementation practices and stakeholder opinions in order to identify ways to optimize these courses and generate long-term results. In our analyses of extensive interview and course observation data, we found that course implementation was highly constrained by state and institutional contexts and that these constraints influenced what happened at the classroom level. Notably, instructors' ability to teach-for-application was limited by compressed course formats, broad curricula, and a disconnect between SDV and the academic side of the college. Few students reported developing the reflective and metacognitive skills necessary for transfer of knowledge and long-term influence on learning outcomes.

These findings help to explain the lack of positive long-term outcomes found in quantitative research on student success courses. Our theory of action for the course contends that College 101 can lead to positive long-term outcomes if it includes pedagogies that promote applied learning, contextualization, reflection, and deliberate practice. However, when implementation constraints discourage teaching-for-application, SDV becomes a source of information that is disconnected from academic coursework and rapidly delivered. This type of information delivery may be useful to students in the short term (and is better than an absence of information) but is unlikely to engender positive long-term outcomes, including application of knowledge. Without the ability and opportunity to apply their learning, students cannot benefit from their College 101 course experiences later in their college careers.

The SDV courses we observed at three community colleges in Virginia appeared to help students with their initial transition to college—for example, giving them study skills that might help in their first semester or giving them basic information for navigating the college campus. However, implementation choices related to course structure, content, and staffing discouraged the courses' use of the in-depth pedagogies necessary for teaching students how to use these skills in other situations or later in their college careers. For example, students were not consistently given the metacognitive tools to recognize when a course is going to be difficult or to understand that an advanced

seminar requires different study skills than an introductory lecture course. In their relatively perfunctory structure, the courses did not always give students the opportunity to develop detailed program plans or an understanding of how to modify their plans when their goals or needs change. Thus, the effects of the course faded once students left the College 101 class and needed to use the skills learned there on their own.

We want to emphasize that our data reveal much that is good and useful about these courses and that we find strong evidence of their worth and promise. Stakeholders uniformly believed that SDV courses on the three campuses in our study were worthwhile and helped students gain comfort on campus and access important information. However, these courses should be refined in order to further increase their impact and better generate long-term outcomes. College 101 courses, when optimized, can serve as a linchpin of the student support experience.<sup>6</sup> Based on our data, we provide suggestions for ways to make College 101 courses more effective, particularly through teaching-for-application. Such reforms can be made within the contexts of enrollment constraints and without requiring College 101 courses to meet for more contact hours. In our fieldwork, we witnessed almost all of these strategies in use, though they were not widespread.

## 7.1 Recommendations

**Narrow course content.** In Virginia's SDV courses, we noted significant addition of course content and an expansive course curriculum, particularly for a one-credit course. Stakeholders found some benefits to using an approach that offered something for everyone, but they also felt rushed and pedagogically limited by the need to cover a large amount of material in a relatively short time. Narrowing course content may ease pressure on instructors and allow for the use of interactive and in-depth pedagogies.

Narrowing course content would require eliminating some topics that might be useful or engaging. Because College 101 courses create a prime opportunity to convey information to students—and are one of the few vehicles for communicating with *all*

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<sup>6</sup> See, for example, Keup and Petschauer (2011), though they are less focused on community colleges.

students—making choices about content can be challenging. However, the pedagogical benefits of narrowing the content outweigh the costs. A narrower curriculum leaves more time for each topic, thereby offering more opportunities for sustained contact with each topic area. Moreover, clarifying the focus and intended outcomes of the course should improve how those not directly involved perceive it. Maintaining a broader curriculum might require making College 101 courses worth more than one credit.

**Engage the academic side of the college with College 101.** College 101 tends to be disconnected from academic coursework, which limits faculty’s opportunity to reinforce College 101–related knowledge outside of the College 101 classroom. This disconnect encourages a negative view of College 101 and lessens its status as a “real” college course. Creating stronger linkages between College 101 and the academic activities of the college can improve transfer of learning because application is encouraged when course material has demonstrated utility and when students have the opportunity to understand when and how to use their new knowledge and skills. Explicitly relating College 101 course content to academic offerings can increase the likelihood that students find course content useful and know when to access and apply it. Linking academics and College 101 can also elevate the reputation of the course. This may help students and non-SDV faculty take College 101 seriously. Both of these results would further encourage learning-for-application.

College 101 can be linked to academics through a variety of approaches. First, academic faculty should be informed of course goals, content, and outcomes. Academic faculty should also be expected to explicitly reinforce College 101–related learning in their own courses, which should lead to stronger transfer of learning by providing additional opportunities for guided practice and reflection. Academic faculty can also help develop College 101 assessments and assignments that are directly applicable to their courses.

Finally, College 101 tends to be located within the support structures of the community college. Moving the course into an academic department, overseen by an academic dean, may increase the connection between the course and the academic functions of the college. This model, used by College 101 in many four-year colleges (Keup & Petschauer, 2011), may create more intentional linkages between academics and

student support services.<sup>7</sup> Such a move not only helps to bridge the divide between College 101 and discipline-based courses but also sends the message that College 101 is fundamentally an academic course with an important purpose.

**Develop deliberate and outcomes-driven staffing structures.** College 101 courses have various types of course instructors, each with advantages and disadvantages. Though staffing is constrained by enrollment and budgetary procedures, colleges could make more strategic choices in this area to encourage classroom-level processes that promote learning-for-application. For example, colleges could use academic faculty to staff College 101 courses. Academic faculty are acutely aware of the demands placed on new college students and presumably could contextualize and provide opportunities for practice within the course curriculum. In addition, using academic faculty would help to bridge the divide between academic courses and College 101 courses.

A number of our respondents suggested moving toward a model of staffing in which College 101 is taught by dedicated college success course instructors. Rather than relying on counselors or academic faculty, all of whom have other job duties in addition to teaching College 101, or interim adjunct instructors, who may have little familiarity with the college, this model would rely on a cadre of full-time instructors whose only course duties pertained to College 101. Presumably, those hired to teach under such a model would be skilled teachers and have the time to develop and refine their pedagogical approaches in order to encourage learning-for-application. This model of course staffing would also provide instructors with long-term positions, allowing them to increase their knowledge of the college and sending the message that the course is important enough to deserve its own faculty, with specialized course knowledge and duties.

**Provide professional development focused on teaching, not logistics.** Regardless of the type of instructor used, our respondents stated that those teaching College 101 need to be skilled teachers. Our theory of action also relies on the course being staffed by individuals who are comfortable with interactive, reflective, and guided practice pedagogies. However, most College 101 instructors are provided little, if any,

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<sup>7</sup> This does not mean that counselors should not teach College 101 or that they would stop doing so if the course were housed in the academic side of the college. It means that administrative oversight of College 101 is linked to academic coursework, increasing its integration with the broader mission of the institution.

professional development aimed at improving their instructional techniques. Offering professional development opportunities that improve instructors' ability to use these techniques in their classroom would significantly improve the likelihood that teachers will provide their students with opportunities to learn-for-application.

Many stakeholders suggested creating ongoing and comprehensive professional development programs. They felt this would be particularly useful for adjuncts but advocated including all College 101 instructors in such activities. Our data analysis supports these contentions, and we would recommend that colleges implement professional development focused on helping instructors think about their teaching methods, share ideas with their colleagues, and develop professional learning communities for sustained reflection on their teaching practice. Such professional development activities could be achieved via multi-day workshops, ongoing seminars, or strategic use of technology. In all formats, College 101 instructors should be encouraged to observe one another's courses and share practices with one another.

**Refine common course materials to be more explicitly applied.** The common course materials used on the three campuses we studied served an important purpose, and instructors appreciated having a bank of classroom activities to use when planning lessons. Modifying these materials so that they more explicitly encourage learning-for-application could enhance their usefulness and improve student outcomes. Instead of offering checklists, worksheets, and quick assignments, course materials should focus on helping instructors craft long-term, reflective, and interactive activities. Course materials might include guides for helping students link their career goals to majors and program planning, essay prompts for reflective writing, or discussion guides.

**Build on the potential of specialized, linked, and learning community College 101 courses.** Although we identified a range of challenges related to implementing contextualized and linked formats of College 101—and these challenges mirror those found in the previous research literature—we also heard that these courses hold the most promise with regards to teaching-for-application. The content of College 101 makes it ideal for pairing with an academic course or topic, and at least in theory, such a pairing allows for authentic opportunities to practice course skills in context.

Linked courses, paired courses, and learning communities help to bridge the divide between academic courses and College 101 courses by requiring cross-faculty collaboration. They also allow for reinforcement of skills across courses and create additional time for guided practice with additional contact hours. Specialized courses also allow instructors to make explicit connections between course content and students' goals; academic and career planning may be discussed more easily and concretely in a course where all students have similar goals. Although implementation of these courses is challenging and depends on instructor collaboration and pedagogical skill, they appear to provide a promising structure for encouraging the classroom practices that lead to application of learning.

## **7.2 Concluding Thoughts**

Our study of three student development courses in Virginia confirms that College 101 courses have the potential to improve student outcomes. There is a strong theory of action supporting their use, and stakeholders believe in their promise. Although the colleges we studied experienced a range of implementation challenges, our analysis suggests that it is possible to improve the courses so that they lead to long-term—rather than only short-term—outcomes. This can be accomplished by organizing these courses so that in-class processes and pedagogies allow students to engage deeply and meaningfully with the course material, practice their new skills, and learn when and how to use their skills in the future.



## References

- Attinasi, L. C., Jr. (1989). Getting in: Mexican Americans' perceptions of university attendance and the implications for freshman year persistence. *Journal of Higher Education, 60*(3), 247–277.
- Bailey, T., Jeong, D. W., & Cho, S. W. (2010). Referral, enrollment, and completion in developmental education sequences in community colleges. *Economics of Education Review, 29*, 255–270.
- Barefoot, B. O., & Fidler, P. P. (1992). *Helping first-year students climb the academic ladder: 1991 national survey of freshman seminar programming* (Monograph Series No. 10). Columbia, SC: University of South Carolina, National Resource Center for the Freshman Year Experience.
- Bean, J. P., & Metzner, B. S. (1985). A conceptual model of nontraditional undergraduate student attrition. *Review of Educational Research, 55*(4), 485–540.
- Berns, R. G., & Erickson, P. M. (2001). *Contextual teaching and learning: Preparing students for the new economy*. Columbus, OH: National Dissemination Center for Career and Technical Education.
- Bill & Melinda Gates Foundation (n.d.). Why college completion? Retrieved from <http://www.gatesfoundation.org/postsecondaryeducation/Pages/why-college-completion.aspx>
- Boudreau, C. A., & Kromrey, J. D. (1994). A longitudinal study of the retention and academic performance of participants in freshmen orientation courses. *Journal of College Student Development, 35*(6), 444–449.
- Bransford, J. D., Brown, A. L., & Cocking, R. R. (Eds.) (2000). *How people learn: Brain, mind, experience, and school*. Washington DC: National Academies Press.
- Bransford, J. D., & Stein, B. S. (1993). *The IDEAL problem solver: A guide to improving thinking, learning, and creativity* (2nd ed.), New York, NY: W. H. Freeman.
- Calcagno, J. C., & Long, B. T. (2008). *The impact of postsecondary remediation using a regression discontinuity approach: Addressing endogenous sorting and noncompliance* (NBER Working Paper No. 14194). Cambridge, MA: National Bureau of Economic Research.
- Cho, S. W., & Karp, M. M. (2012). *Student success courses and educational outcomes at Virginia community colleges* (CCRC Working Paper No. 40). New York, NY: Columbia University, Teachers College, Community College Research Center.

- Collier, P. J., & Morgan, D. L. (2008). "Is that paper really due today?": Differences in first-generation and traditional college students' understandings of faculty expectations. *Higher Education*, 55(4), 425–446.
- Conley, D. T. (2010). *College and career ready: Helping all students succeed beyond high school*. San Francisco, CA: Jossey-Bass.
- Davidson, J. E., Deuser, R., & Sternberg, R. J. (1994). The role of metacognition in problem solving. In J. Metcalfe & A. Shimamura (Eds.), *Metacognition: Knowing about knowing* (pp. 207–226). Cambridge, MA: MIT Press.
- Dickie, L. O., & Farrell, J. E. (1991). The transition from high school to college: An impedance mismatch? *The Physics Teacher*, 29(7), 440–445.
- Ericsson, K. A., Krampe, R. T., & Tesch-Römer, C. (1993). The role of deliberate practice in the acquisition of expert performance. *Psychological Review*, 100(3), 363–406.
- Flavell, J. H. (1979). Metacognition and cognitive monitoring: A new area of cognitive-developmental inquiry. *American Psychologist*, 34(10), 906–911.
- Grubb, W. N. (2006). "Like, what do I do now?": The dilemmas of guidance counseling. In T. Bailey & V. S. Morest (Eds.), *Defending the community college equity agenda* (pp. 195–222). Baltimore, MD: The Johns Hopkins University Press.
- Hiebert, J. S., & Grouws, D. A. (2007). The effects of classroom mathematics teaching on students' learning. In F. K. Lester, Jr., (Ed.), *Second handbook of research on mathematics teaching and learning* (pp. 371–404). Charlotte, NC: Information Age Publishing.
- Higher Education Research Institute (2011). *Your First College Year Survey 2010*. Los Angeles, CA: Author.
- Karp, M. M., & Bork, R. H. (2012). "They never told me what to expect, so I didn't know what to do": *Defining and clarifying the role of a community college student* (CCRC Working Paper No. 47). New York, NY: Columbia University, Teachers College, Community College Research Center.
- Keup, J. R., & Petschauer, J. W. (2011). *The first year seminar: Designing, implementing, and assessing courses to support student learning and success*. Columbia, SC: University of South Carolina, National Resource Center for The First-Year Experience and Students in Transition.
- Lumina Foundation. (2011). *Lumina Foundation's strategic plan: Goal 2025*. Retrieved from [http://www.luminafoundation.org/wp-content/uploads/2011/02/Lumina\\_Strategic\\_Plan.pdf](http://www.luminafoundation.org/wp-content/uploads/2011/02/Lumina_Strategic_Plan.pdf)

- McPhail, C. J. (2011). *The completion agenda: A call to action*. Washington, DC: American Association of Community Colleges.
- Miles, M. B., & Huberman, A. M. (1994). *Qualitative data analysis: An expanded sourcebook*. Thousand Oaks, CA: Sage Publications.
- Obama, B. (2009). Address to joint session of Congress on February 24, 2009. Retrieved from [http://www.whitehouse.gov/the\\_press\\_office/Remarks-of-President-Barack-Obama-Address-to-Joint-Session-of-Congress/](http://www.whitehouse.gov/the_press_office/Remarks-of-President-Barack-Obama-Address-to-Joint-Session-of-Congress/)
- Padgett, R. D., & Keup, J. R. (2011). *2009 national survey of first-year seminars: Ongoing efforts to support students in transition*. Columbia, SC: University of South Carolina, National Resource Center for The First-Year Experience and Students in Transition.
- Pascarella, E. T., & Terenzini, P. T. (2005). *How college affects students: A third decade of research* (Vol. 2). San Francisco, CA: Jossey-Bass.
- Perin, D. & Hare, R. (2010). *A contextualized reading-writing intervention for community college students* (CCRC Brief No. 44). New York, NY: Columbia University, Teachers College, Community College Research Center.
- Provasnik, S., & Planty, M. (2008). *Community colleges: Special supplement to The Condition of Education 2008*. Washington, DC: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics.
- Roksa, J., Jenkins, D., Jaggars, S. S., Zeidenberg, M., & Cho, S. W. (2009). *Strategies for promoting gatekeeper course success among students needing remediation: Research report for the Virginia Community College System*. New York, NY: Columbia University, Teachers College, Community College Research Center.
- Rosenbaum, J. E., Deil-Amen, R., & Person, A. E. (2006). *After admission: From college access to college success*. New York, NY: Russell Sage Foundation.
- Rutschow, E. Z., Cullinan, D., & Welbeck, R. (2012). *Keeping students on course: An impact study of a student success course at Guilford Technical Community College*. New York, NY: MDRC.
- Schnell, C. A., & Doetkott, C. D. (2003). First year seminars produce long-term impact. *Journal of College Student Retention*, 4(4), 377–391.
- Scott-Clayton, J. (2011). *The shapeless river: Does a lack of structure inhibit students' progress at community colleges?* (CCRC Working Paper No. 25, Assessment of Evidence Series). New York, NY: Columbia University, Teachers College, Community College Research Center.

- Scrivener, S., Sommo, C., & Collado, H. (2009). *Getting back on track: Effects of a community college program for probationary students*. New York, NY: MDRC.
- Shields, N. (2002). Anticipatory socialization, adjustment to university life, and perceived stress: Generational and sibling effects. *Social Psychology of Education, 5*(4), 365–392.
- Singley, M. K., & Anderson, J. R. (1989). *The transfer of cognitive skill*. Cambridge, MA: Harvard University Press.
- Stearns, M. S., Greene, D., David, J. L., & Associates. (1980). *Local implementation of PL 94-142: First year report of a longitudinal study (SRI Project 7124)*. Menlo Park, CA: SRI International
- Strumpf, G., & Hunt, P. (1993). The effects of an orientation course on the retention and academic standing of entering freshmen, controlling for the volunteer effect. *Journal of the Freshman Year Experience, 5*(1), 7–14.
- Tinto, V. (1993). *Leaving college: Rethinking the causes and cures of student attrition* (2nd ed.). Chicago, IL: University of Chicago Press.
- Visher, M. G., Schneider, E., Wathington, H., & Collado, H. (2010). *Scaling up learning communities: The experience of six community colleges*. New York, NY: National Center for Postsecondary Research.
- Visher, M. G., Weiss, M. J., Weissman, E., Rudd, T., & Wathington, H. D. (with Teres, J., & Fong, K.). (2012). *The effects of learning communities for students in developmental education: A synthesis of findings from six community colleges*. New York, NY: National Center for Postsecondary Research.
- Virginia Community College System. (2011). *Learning outcomes for SDV 100, 101, and 108*. Richmond, VA: Author.
- Weiss, M. J., Brock, T., Sommo, C., Rudd, T., & Turner, M. C. (2011). *Serving community college students on probation: Four-year findings from Chaffey College's Opening Doors program*. New York, NY: MDRC.
- Yamasaki, K. (2010). *Enrollment in success courses: Credential completion rates and developmental education in the North Carolina Community College System* (Master's thesis). Sanford School of Public Policy, Duke University, Durham, NC.
- Zeidenberg, M., Jenkins, D., & Calcagno, J. C. (2007). *Do student success courses actually help community college students succeed?* (CCRC Brief No. 36). New York, NY: Columbia University, Teachers College, Community College Research Center.