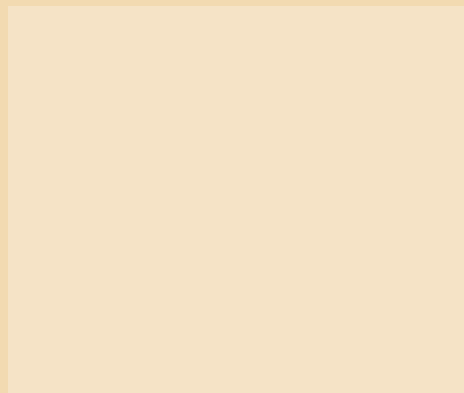
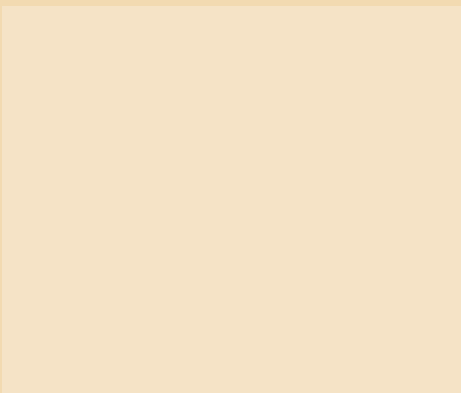


A Matter of Degrees



**Promising
Practices for
Community
College Student
Success**
A FIRST LOOK



Acknowledgments

Community colleges currently are experiencing perhaps the highest expectations and the greatest challenges in their history. Facing fiscal constraint, enrollment pressures, and summons to support economic recovery, these institutions also are rising to a new clarion call: the “community college completion challenge.” Never has it been so clear that the futures of individuals, communities, and the nation rest significantly on the ability of community and technical colleges to ensure that far greater numbers of their students succeed in college, attain high-quality certificates and degrees, and transfer to baccalaureate institutions.

As the student success and college completion agenda builds momentum across the land, there is understandably a growing demand for useful information regarding effective educational practices. Fortunately, there also is emerging evidence regarding a collection of promising practices — strategies that appear to be associated with a variety of indicators of student progress and success. This report, the first in a series, describes a new phase of work at the Center for Community College Student Engagement that aims to contribute further to that growing body of knowledge about what works in promoting student success.

The Center’s work builds on our own research but also on the work of others: the Community College Research Center and Center for Postsecondary Research at Teachers College, Columbia University; other university-based researchers, including colleagues at The University of Texas; and colleagues in the national Achieving the Dream initiative, the new Completion by Design initiative, and numerous other serious efforts aimed at improving community college education. Special thanks are due to the hundreds of community colleges and hundreds of thousands of students and faculty who have participated in the Center’s surveys, as well as those whose voices are lifted up through our focus group work. The findings presented in this report are made possible through the generous support of the Bill & Melinda Gates Foundation, Houston Endowment Inc., Lumina Foundation for Education, and MetLife Foundation.

Kay McClenney
Director
Center for Community College Student Engagement

Supported by grants from

Bill & Melinda Gates Foundation
Houston Endowment Inc.
Lumina Foundation for Education
MetLife Foundation

Co-sponsored by

The Carnegie Foundation for the Advancement
of Teaching

Published by the Center for Community College Student Engagement.

© 2012 Permission granted for unlimited copying with appropriate citation.

Please cite this report as: Center for Community College Student Engagement. (2012). *A Matter of Degrees: Promising Practices for Community College Student Success (A First Look)*. Austin, TX: The University of Texas at Austin, Community College Leadership Program.

Contents

PAGE

2	Helping Colleges Invest in Success		
5	Design Principles for Effective Practices		
6	Characteristics of Community College Students		
8	Promising Practices for Community College Student Success		
	Planning for Success	Initiating Success	Sustaining Success
	■ <i>Assessment and Placement</i>	■ <i>Accelerated or Fast-Track Developmental Education</i>	■ <i>Class Attendance</i>
	■ <i>Orientation</i>	■ <i>First-Year Experience</i>	■ <i>Alert and Intervention</i>
	■ <i>Academic Goal Setting and Planning</i>	■ <i>Student Success Course</i>	■ <i>Experiential Learning beyond the Classroom</i>
	■ <i>Registration before Classes Begin</i>	■ <i>Learning Community</i>	■ <i>Tutoring</i>
			■ <i>Supplemental Instruction</i>
25	Designing Practices for Student Success		
29	Next Steps for the Center and Colleges		
30	Overview of the Respondents		
32	Center National Advisory Board		

“Do not zero in on finding the silver bullet. There aren’t any. The effects of college are cumulative across a range of activities.”

— Patrick Terenzini
*Distinguished Professor and Senior Scientist, Emeritus
Center for the Study of Higher Education
The Pennsylvania State University*

Helping Colleges Invest in Success

Community colleges across the country have created innovative, data-informed programs that are models for educating underprepared students, engaging traditionally underserved students, and helping students from all backgrounds succeed. However, because most of these programs have limited scope, the field now has pockets of success rather than widespread improvement. Turning these many small accomplishments into broad achievement — and improved completion rates — depends on bringing effective programs to scale.

To meet this challenge while facing shrinking budgets and rising enrollment, colleges must be certain that all of their resources — time and money — are being spent on educational practices that work for all students. But what makes a practice effective? And how can colleges identify the mix of practices they should use to close achievement gaps so all students succeed?

To help colleges answer these questions, the Center for Community College Student Engagement has launched a special initiative, *Identifying and Promoting High-Impact Educational Practices in Community Colleges*. This report presents the initiative's preliminary findings.

Community colleges are increasingly aware of the need to substantially increase the completion of certificates and degrees. But there now is unprecedented urgency for this work because having more successful community college graduates is essential to sustaining our local and national economies as well as maintaining strong communities with engaged citizens.

This report describes 13 promising practices in community colleges. Over the next three years, the Center will conduct additional data analysis, hold focus groups with students and faculty members, and

continue the review of efforts under way in community colleges. This work will contribute significant new knowledge about high-impact educational practices and how they are associated with student engagement, persistence, and completion in community colleges.

Colleges will be able to use these and future findings to make sound, evidence-based decisions about how to focus institutional energy, reallocate limited resources, design more effective programs, and bring strong programs to more students.



“If we are going to make a substantial dent in completion rates, we must ask, ‘How can we reshape students’ experience in the one place where they will be while they are on campus: in the classroom?’”

— Vincent Tinto
Distinguished Professor
Syracuse University

Identifying and Promoting High-Impact Educational Practices

The Center's initiative on high-impact practices is a multiyear effort that draws on data from students, faculty members, and colleges. Findings from surveys and focus groups will be presented in a series of reports.

This report provides a first look at the data on promising practices. These are educational practices for which there is emerging evidence of success: research from the field and from multiple colleges with multiple semesters of data showing improvement on an array of metrics, such as course completion, retention, and graduation.

This first look describes the promising practices from four perspectives: entering students describing their earliest college experiences, students addressing their overall college experiences, faculty members providing their perceptions of student engagement, and colleges focusing on their use of the practices.

Colleges can use these initial findings as they examine their use of these promising practices. Moreover, while this first-look report addresses practices individually, looking at data across the practices highlights incongruities that colleges must address if they are to

improve outcomes. For example, 79% of entering students report that they plan to earn an associate degree, but just 45% of full-time students meet that goal within six years. Colleges can use these incongruities to focus discussions about what outcomes are most important and what policies and practices are most likely to result in those outcomes.

After additional data collection and analyses, the Center will report on high-impact practices for success and completion at community colleges. Subsequent reporting will aim to identify and define high-impact practices by examining the student, faculty, and institutional data about promising practices in relationship to overall levels of student engagement as well as student outcome data.

The Center's examination of educational practices includes the Center's four quantitative surveys, qualitative data from focus groups and interviews with students and faculty, and an extensive review of existing research. As part of this work, the Center introduced the Community College Institutional Survey (CCIS) as well as new items on promising practices for its surveys of entering students, the overall student population, and faculty. (See p. 4 for details about the surveys used for the high-impact practices project.)

Data collection from CCIS and the additional promising practices items from the other surveys will continue through 2012 and beyond, and all community colleges are invited to participate.

The Center Opposes Ranking

The Center opposes using its data to rank colleges for a number of reasons:

- There is no single number that can adequately — or accurately — describe a college's performance; most colleges will perform relatively well on some benchmarks and need improvement on others.
- Each community college's performance should be considered in terms of its mission, institutional focus, and student characteristics.
- Because of differences in these areas — and variations in college resources — comparing survey results among individual institutions serves little constructive purpose and likely will be misleading.
- Participating colleges are a self-selected group. Their choice to participate in the survey demonstrates their interest in assessing and improving their educational practices, and it distinguishes them. Ranking within this group of colleges — those willing to step up to serious self-assessment and public reporting — might discourage participation and certainly would paint an incomplete picture.
- Ranking does not serve a purpose related to improving student outcomes. Improvement over time — where a particular college is now compared with where it wants to be — is likely the best gauge of a college's efforts to enhance student learning and persistence.

“We have in our arsenal ways to engage students in substantive ways. We know a lot more about what works than we use.”

— George Kuh

*Chancellor's Professor Emeritus
Indiana University, Bloomington*



Four Surveys, Four Perspectives

SENSE, *CCSSE*, *CCFSSE*, and *CCIS*

The Center administers four surveys that complement one another: Survey of Entering Student Engagement (*SENSE*), Community College Survey of Student Engagement (*CCSSE*), Community College Faculty Survey of Student Engagement (*CCFSSE*), and Community College Institutional Survey (*CCIS*). All are tools that assess student engagement — how connected students are to college faculty and staff, other students, and their studies — and institutional practice.

Each of the four surveys collects data from a particular perspective, and together they provide a comprehensive understanding of educational practices on community college campuses and how these practices influence students' experiences.

SENSE is administered during weeks four and five of the fall academic term in classes most likely to enroll first-time students. *SENSE* focuses on students' experiences from the time of their decision to attend their college through the end of the first three weeks of the fall term. The survey collects data on practices that are most likely to strengthen early student engagement. Entering students are those who indicate that it is their first time at the college where the survey is administered.

CCSSE, administered in the spring, surveys credit students and gathers information about their overall college experience. It focuses on educational practices and student behaviors associated with higher levels of learning, persistence, and completion.

CCFSSE is administered in conjunction with *CCSSE* to all faculty teaching credit courses in the academic term during which the college is participating in the student survey. The faculty survey reports on instructors' perceptions about student experiences as well as data about their teaching practices and use of professional time.

CCIS, the Center's newest instrument, was developed as part of the Center's initiative on identifying and promoting high-impact educational practices in community colleges. *CCIS* collects information about whether and how colleges implement a variety of promising practices.

Note: *CCIS* results are preliminary and based on a sample of colleges. Due to the survey's branching structure and the possibility of non-response across various items, the number of respondents for each item ranges from 48 to 288 colleges; representativeness, therefore, varies from item to item. For clarity, each data point presented is accompanied by the number of colleges that responded to the relevant survey item. The data set will be expanded through future survey administrations.

Quantitative and Qualitative Data

The Center uses both quantitative and qualitative data to paint a complete picture of students' college experiences. The four surveys provide detailed quantitative data, and the Center gathers qualitative data through focus groups and interviews with students, faculty, student services professionals, and college presidents.

The Center's survey data help colleges better understand *what* is happening. Information from focus groups and interviews can help them begin to figure out *why*.

The Power of Multiple Perspectives

The Center encourages colleges to examine data across surveys while cautioning that the ability to make direct comparisons may be limited. For example, with the *CCSSE* instrument, students report their personal experiences, while with *CCFSSE*, faculty members indicate their perceptions of student experiences in the college.

Nonetheless, when there is a gap between the student experience and the faculty's perception of that experience, the data can inspire powerful conversations about why an apparent gap exists and what it may mean. Many Center member colleges report that looking at student and faculty data side-by-side has been the impetus for significant faculty-led change on their campuses.

Core Surveys and Special-Focus Modules

SENSE and *CCSSE* each have a core set of survey items, which is the same from year to year, as well as a mechanism to add items that can change from year to year. The core surveys provide a large sample of data that is stable over time while special-focus items and modules examine areas of student experience and institutional performance that are of particular interest to the field. Special-focus items for the 2011 and 2012 surveys address promising practices for promoting student success and completion.

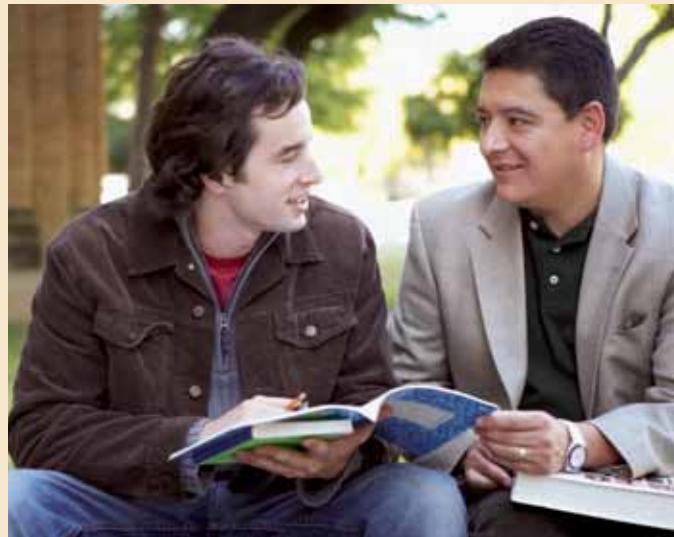
Design Principles for Effective Practice

The Center’s multiyear project uses input from students, faculty, and college leaders to explore the relative and combined value of 13 promising educational practices. The project builds on institutional work and a body of research about current practices and their results.

However, the effectiveness of any educational practice depends on its specific design and quality of implementation. At colleges across the country, the practices described in this report are implemented in a variety of ways and, as a result, their effectiveness can differ dramatically.

There is emerging consensus that certain design principles are critical for student success. No matter what program or practice a college implements, it is likely to have a greater impact if its design incorporates the following principles.

- **A strong start.** Focusing attention on the front door of the college — ensuring that students’ earliest contacts and first weeks incorporate experiences that will foster personal connections and enhance their chances of success — is a smart investment.
- **Clear, coherent pathways.** The many choices and options students face as they endeavor to navigate through college systems can create unnecessary confusion — and inhibit students’ success. Colleges can improve student success (and minimize ill-used time) by creating coherent pathways that help students move through an engaging collegiate experience.
- **Integrated support.** Time is a resource — one of the most important resources a college has — and it is finite. A large part of improving success involves effectively connecting with students where they are most likely to be: in the classroom. This means building support, such as skills development and supplemental instruction, into coursework rather than referring students to services that are separate from the learning experience.
- **High expectations and high support.** Students do their best when the bar is high but within reach. Setting a high standard and then giving students the necessary support — academic planning, academic support, financial aid, and so on — makes the standard attainable.



“What will it take to help teachers rethink the precious minutes they have with students in the classroom?”

— Emily Lardner
Co-director

Washington Center for Improving Undergraduate Education
Evergreen State College

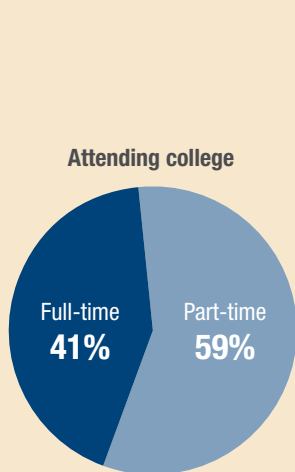
- **Intensive student engagement.** Promoting student engagement is the overarching feature of successful program design, and all other features support it. In design and implementation of the collegiate experience, colleges must make engagement inescapable for their students.
- **Design for scale.** Bringing practices to scale requires a long-term commitment of time and money. Securing and maintaining this commitment requires significant political, financial, and human capital. In addition to allocating — and reallocating — available funding, colleges must genuinely involve faculty, staff, and students.
- **Professional development.** Improving student success rates and meeting college completion goals require individuals not only to re-conceptualize their roles but also to work differently. This means that professional development is not just for instructors. It is for everyone: staff, faculty, administrators, and governing boards.

The body of evidence about these design principles is growing. Even as we continue to learn, colleges must act on it. Improving student engagement and attainment cannot be the work of a select team or an isolated department. To achieve the needed scale, faculty and staff must collaborate across departments and throughout the college. Then, more students will experience — and benefit from — all their colleges have to offer.

Characteristics of Community College Students

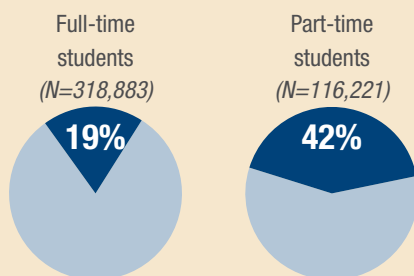
Students Balance Priorities

Most students attend classes and study while working; caring for dependents; and juggling personal, academic, and financial challenges. Colleges can help students plan their coursework around their other commitments and help students develop skills to manage the demands on their time.



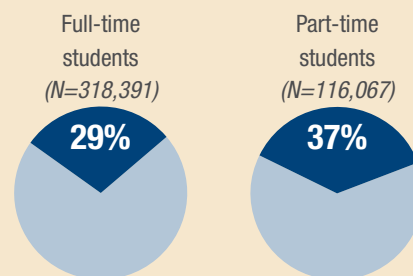
Source: IPEDS, fall 2009.

Working more than 30 hours per week



Source: 2011 CCSSE Cohort data.

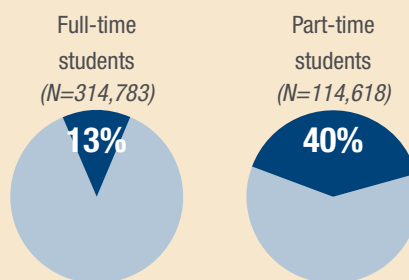
Caring for dependents 11 or more hours per week



Source: 2011 CCSSE Cohort data.

67% of full-time students and **78%** of part-time students work at least one hour per week while taking classes.
53% of full-time students and **60%** of part-time students care for dependents at least one hour per week.

Taking evening and weekend classes

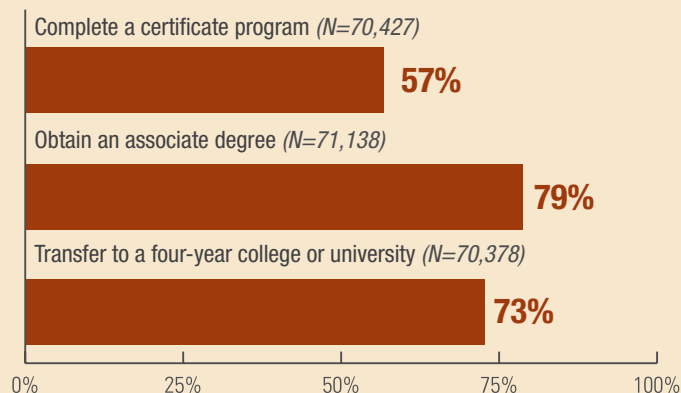


Source: 2011 CCSSE Cohort data.

Entering Students' Aspirations

The data show a sizable gap between the percentage of students who aim to complete a credential and the percentage of those who actually do.

Please indicate whether your goal(s) for attending this college include the following:



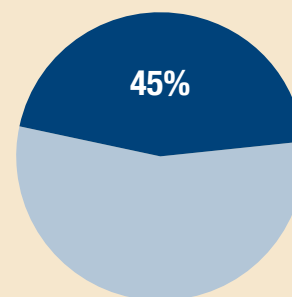
Respondents may indicate more than one goal.

Source: 2010 SENSE Cohort data.

Fewer than Half of Students Reach Their Goal

Fewer than half of entering community college students with a goal of earning a degree or certificate meet their goal within six years after beginning college.

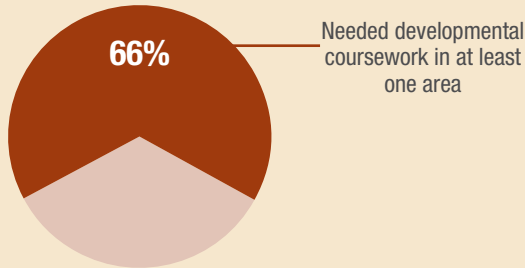
Met their goal within six years



Source: U.S. Department of Education, NCES (2001). *Beginning Postsecondary Students Longitudinal Study 1996–2001* (BPS:96/01). Analysis by Community College Research Center.

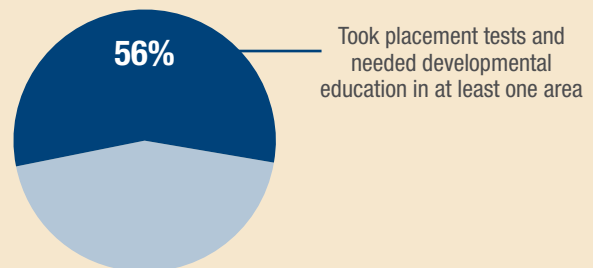
Percentage of Students Who Are Underprepared

SENSE respondents (entering students) who report their placement tests indicated they needed developmental coursework in at least one area (N=75,587)



Source: 2010 SENSE Cohort data.

CCSSE Promising Practices respondents who report that they took a placement test and the test indicated that they needed developmental education in at least one area (N=121,114)

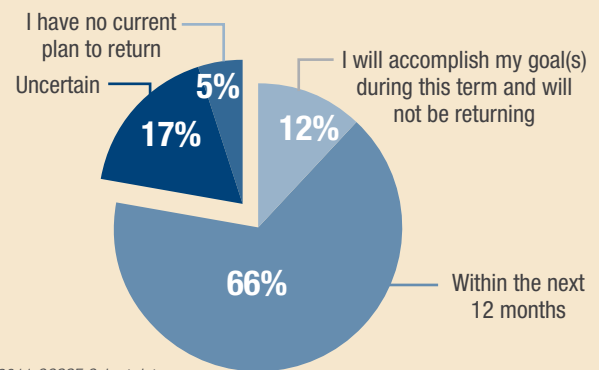


Source: 2011 CCSSE Promising Practices data.

Students' Plans after the Current Semester

Asked about their plans after the current semester, 22% of **CCSSE** respondents report that they have no plan to return to this college or are uncertain about their future plans. These data suggest an opportunity for colleges to help students establish academic plans and pathways that will help them persist in college.

When do you plan to take classes at this college again? (N=433,639)



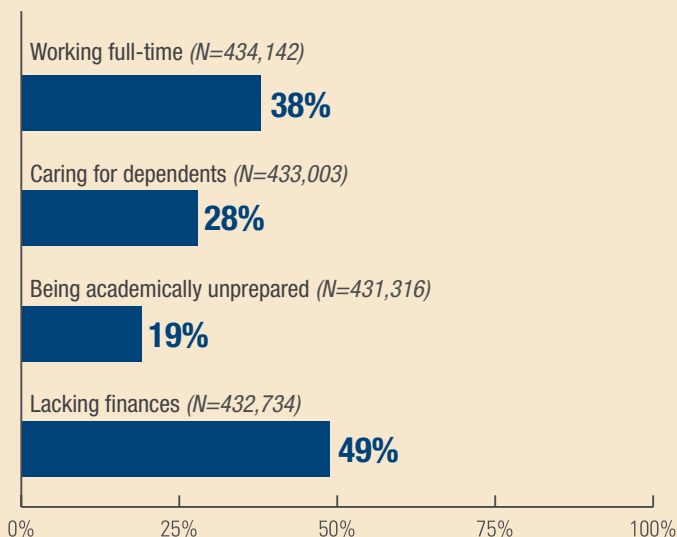
Source: 2011 CCSSE Cohort data.

Student and Faculty Views: What Stands between Students and Their Aspirations

CCSSE and **CCFSSE** data indicate that many faculty are more likely than students to believe that various circumstances, including working full-time, caring for dependents, or being academically underprepared, would be likely causes for students to withdraw from classes or college.

How likely is it that the following issues would cause you to withdraw from class or this college?

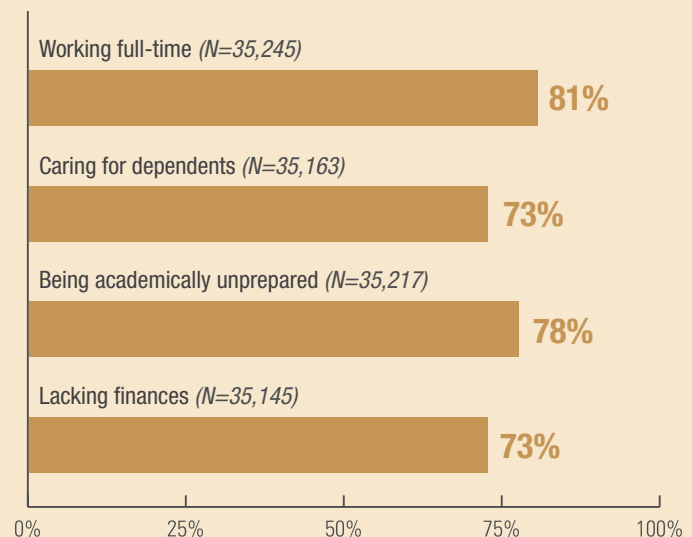
Students responding *likely or very likely*



Source: 2011 CCSSE Cohort data.

How likely is it that the following issues would cause students to withdraw from class or this college?

Faculty responding *likely or very likely*



Source: 2011 CCFSSSE Cohort data.

Promising Practices for Community College Student Success

The promising practices described on the following pages are part of collegiate learning experiences that attend to students' needs from their first interactions with the college through the successful completion of their first academic term and beyond. The practices are divided into three groups: planning for success, initiating success, and sustaining success.

Planning for Success

- *Assessment and Placement*
- *Orientation*
- *Academic Goal Setting and Planning*
- *Registration before Classes Begin*

Initiating Success

- *Accelerated or Fast-Track Developmental Education*
- *First-Year Experience*
- *Student Success Course*
- *Learning Community*

Sustaining Success

- *Class Attendance*
- *Alert and Intervention*
- *Experiential Learning beyond the Classroom*
- *Tutoring*
- *Supplemental Instruction*

Planning for Success

Assessment and Placement

"I've always been good in every subject I've taken, so it was a shock to me that I was right on the borderline."

— Student

Completing developmental education requirements early is related to higher overall achievement, and students can't complete if they don't enroll. Research suggests that students who need developmental education and enroll in the proper courses *during their first term* are more likely to complete their developmental sequence than are students who need developmental education but do not attempt any developmental courses during their first term.¹

Large numbers of students are being assessed and placed into developmental education. Among *SENSE* respondents (N=73,299), 88% report that they were required to take a placement test. In addition, 82% of *SENSE* Promising Practices respondents (N=23,470) who reported their placement test results indicated they needed developmental education also reported they were required to take at least one developmental education course in their first semester.

CCSSE Promising Practices data show slightly lower figures: 74% of respondents (N=128,924) report that they were required to take a placement test. Of those students whose placement tests indicated that they needed developmental education (N=71,167), 68% say they were told that they were required to take a developmental course in their first term.

These high responses for testing and moderate responses for placement still leave 12% of *SENSE* respondents (N=73,299) and 26% of *CCSSE* Promising Practices respondents (N=128,924) who indicate that they did not have to take a placement test.

Making sure that students take the right classes is a multistep process. Colleges should create opportunities for students to participate in review or brush-up experiences before placement tests to minimize the amount of remediation students need. Then, after students have been assessed, those who still need remediation should be placed into developmental pathways where they will have a stronger chance to succeed rather than multiple opportunities to fail.

"My developmental class is ridiculously easy."

— Student

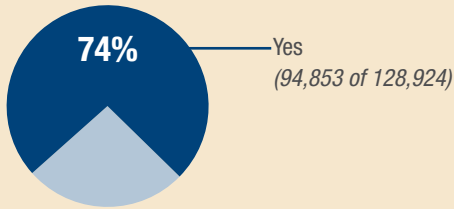


Assessment and Proper Enrollment: Most Students Are Taking Placement Tests and Properly Enrolling

Student Responses

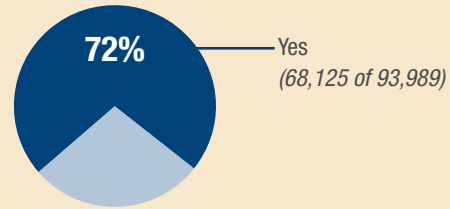
Most Students Are Required to Take Placement Tests and Enroll in Needed Courses

Percentage of students who report that they are required to take reading, writing, and/or math placement tests before registering for their first semester



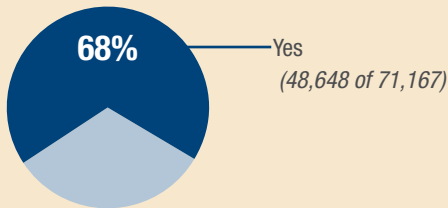
Source: 2011 CCSSE Promising Practices data.

Among students who report taking a placement test, the percentage who report that the test indicated that they needed developmental education in at least one area



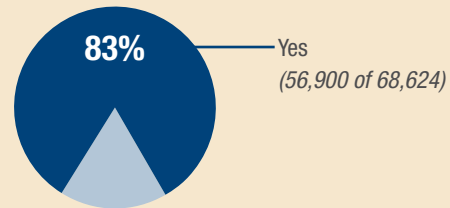
Source: 2011 CCSSE Promising Practices data.

Among students who report taking a placement test and needing developmental education, the percentage who say they were told they were required to take at least one developmental education course in their first term



Source: 2011 CCSSE Promising Practices data.

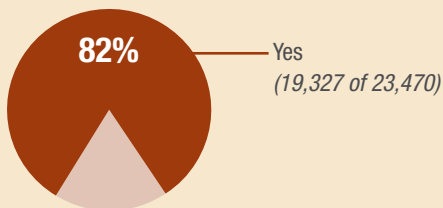
Among students who say they were told they were required to take at least one developmental education course in their first term, the percentage who say they actually enrolled in at least one developmental education class



Source: 2011 CCSSE Promising Practices data.

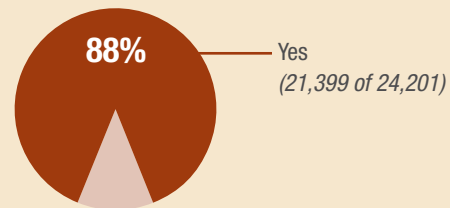
“I have no idea why I got placed where I was.”
— Student

Among entering students who report taking a placement test and needing developmental education, the percentage who say they were told they were required to take at least one developmental education course in their first term



Source: 2011 SENSE Promising Practices data.

Among entering students who say they were told they were required to take at least one developmental education course in their first term, the percentage who actually enrolled in at least one developmental education class



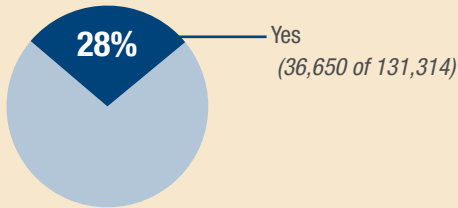
Source: 2011 SENSE Promising Practices data.

Assessment and Proper Enrollment: Testing Alone Isn't Enough

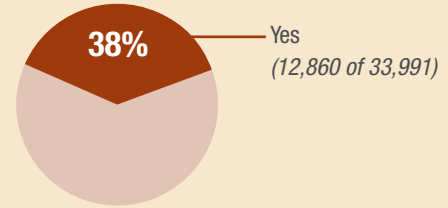
Student Responses

Many Students Do Not Prepare for Placement Tests

Before enrolling at this college, I used online or printed materials provided by the college to help me prepare on my own for this college's placement test(s).

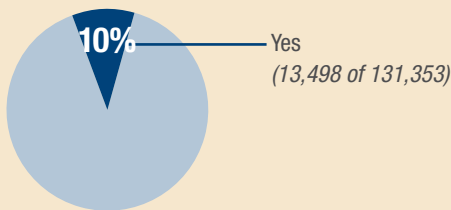


Source: 2011 CCSSE Promising Practices data.

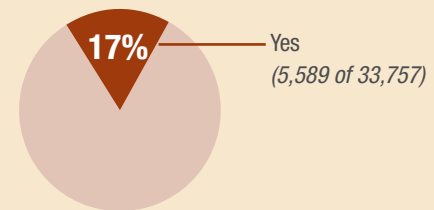


Source: 2011 SENSE Promising Practices data (entering students).

Before enrolling at this college, I participated in a brief (8 hours or less), intensive brushup/refresher workshop designed to help me prepare for this college's placement test(s).

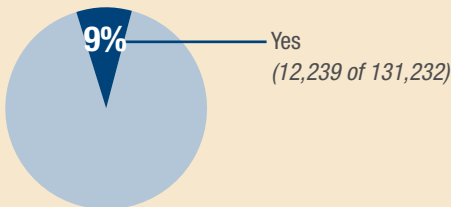


Source: 2011 CCSSE Promising Practices data.

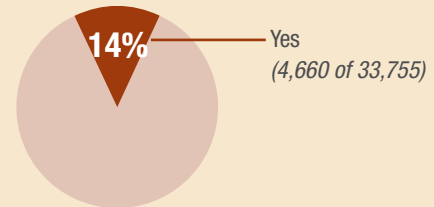


Source: 2011 SENSE Promising Practices data (entering students).

Before enrolling at this college, I participated in a multiday or multiweek brushup/refresher program (often held during the summer before fall enrollment) designed to help me prepare for this college's placement test(s).



Source: 2011 CCSSE Promising Practices data.

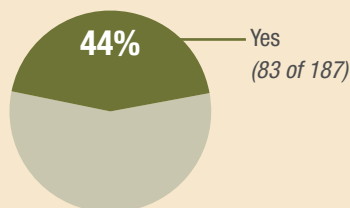


Source: 2011 SENSE Promising Practices data (entering students).

College Responses

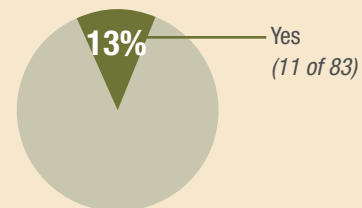
Many Colleges Offer Prep Experiences, but Few Require Them

Percentage of colleges that say they offer some form of placement test-prep experience for reading, writing, or math



Source: 2011 CCIS data.

Percentage of colleges offering a test-prep experience that report the test prep is mandatory for all first-time students, including full-time students and part-time students



Source: 2011 CCIS data.

Orientation

“At orientation, they took us around the whole campus, anywhere we wanted to go, and showed us everything, so I was familiar with the school before I started.”

— Student

Colleges use a variety of approaches to student orientation. Orientation can be a single two-hour session that helps students find their way around campus, explains registration, and mentions support services. It also can be incorporated into a full-semester program, such as a student success course. Or it can be anything in between. Typically, however, an orientation is an experience that helps students know what they most need to know before classes begin.

Research shows that orientation services lead to higher student satisfaction, greater use of student support services, and improved retention of at-risk students.² Yet after three weeks of college, 19% of entering students (14,416 of 74,261) are unaware of an orientation program.

Among those colleges reporting on CCIS that they have an orientation program (276 of 288), just 38% report that they require it for all first-time (full-time and part-time) students. The most frequently cited components of orientation are information about and/or use of the college’s personal/social support services; information about and/or use of the college’s academic support network; and use of information resources (e.g., library, finding and evaluating sources).

“[Online orientation was] a couple of people talking about the campus, and then you took a test about what they said. I would have preferred to come to school to walk around.”

— Student



Academic Goal Setting and Planning

“I have my whole plan ... all my credits to transfer, exactly what classes and everything. It helps a lot financially and keeps you on track. It just keeps you motivated.”

— Student

Attaining a goal becomes dramatically easier when the goal is specific and the path to reaching it is clear. Defining this path is the work of academic goal setting and planning.

Ninety-one percent of CCSSE respondents (376,899 of 414,646) report that academic advising/planning is a *somewhat* or *very important* service. *SENSE* data, however, indicate that many entering students are not getting the kind of advising that will help them most.

While 71% of *SENSE* respondents (52,112 of 73,502) *agree* or *strongly agree* that an advisor helped them identify the courses they needed to take during their first academic term, only 38% (27,936 of 73,406) *agree* or *strongly agree* that an advisor helped them set academic goals and create a plan for achieving them. An even smaller proportion, 26% (19,085 of 73,488) indicate that someone talked to them about their outside commitments while helping them decide how many courses to take during their first term.

While academic planning certainly includes course selection, community college students need advising that helps them set and maintain long-term goals. This type of advising and planning centers on creating a clear path from where students are now to their ultimate educational goals. Regular advising provides opportunities to update the plan to respond to changing goals, interests, or circumstances. The academic plan keeps students focused because it shows how each course brings them closer to a key milestone and, ultimately, to the certificate or degree they seek.

“I feel like I’m wasting time because counselors just write down the classes you need and give you the paper.”

— Student

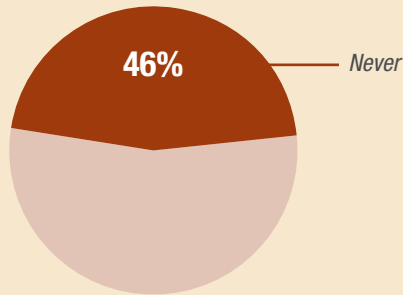


Academic Advising and Planning

Entering Student Responses

Nearly Half of Students Do Not Use Advising and Planning Services

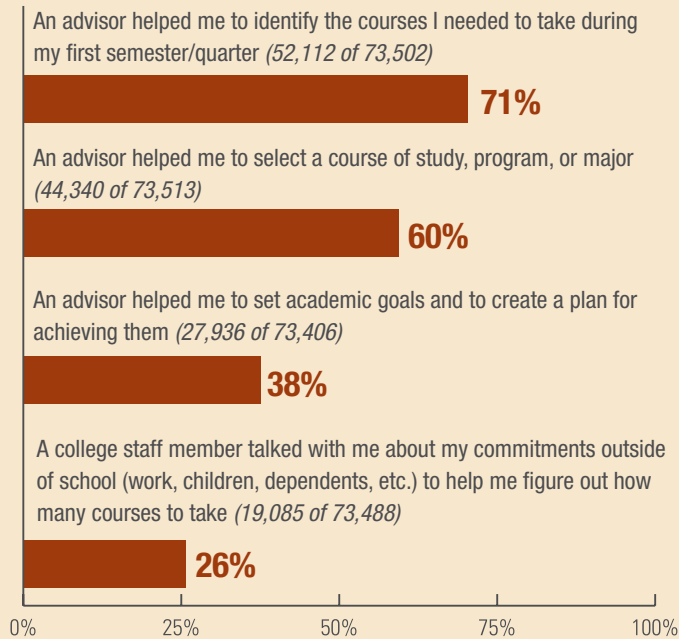
How often did you use academic advising/planning services from the time of your decision to attend this college through the end of the first three weeks of your first semester/quarter? (N=70,179)



Source: 2010 SENSE Cohort data.

Entering Students' Experience with Academic Advising

Percentage of students responding *agree* or *strongly agree*

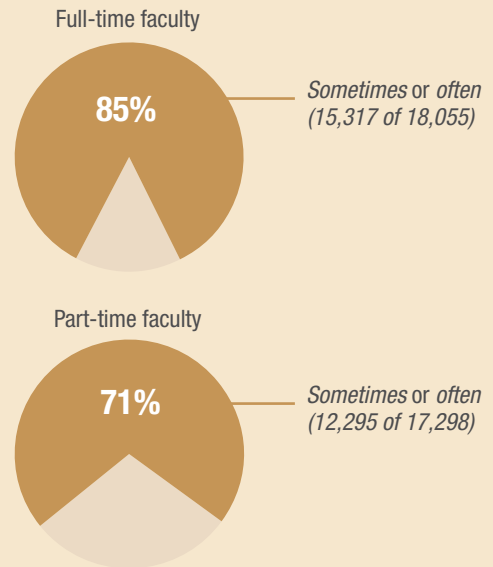


Source: 2010 SENSE Cohort data.

Faculty Responses

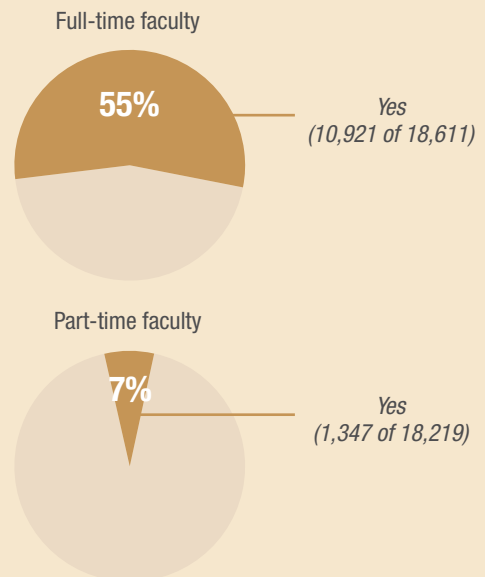
Faculty Members' Involvement in Advising

How often do you refer students to academic advising/planning services?



Source: 2011 CCFSSSE Cohort data.

During the current academic year, is academic advising part of your teaching role at this college?

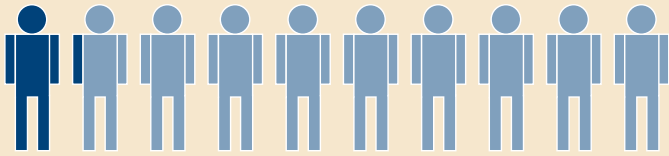


Source: 2011 CCFSSSE Cohort data.

Registration: Students Register Late

Student Responses

More than one in 10 *CCSSE* respondents (11%) report they registered late (after the first class meeting) for at least one class. (26,828 of 238,504 respondents)



Fewer than 1 in 10 *SENSE* respondents (8%) say they registered late (after the first class meeting) for at least one class. (2,629 of 34,266 respondents)

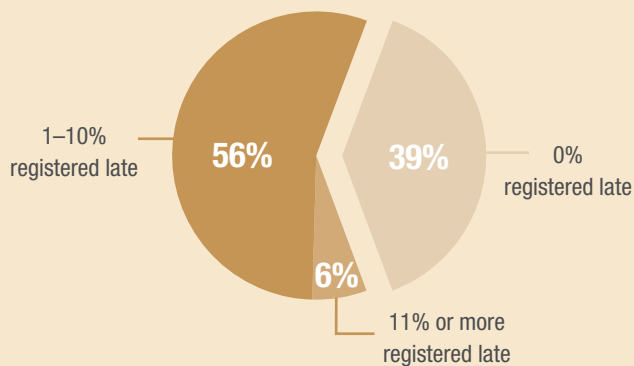


Source: 2011 *CCSSE* Promising Practices data and 2011 *SENSE* Promising Practices data.

Faculty Responses

Nearly two-thirds (62%) of *CCFSSE* respondents report that at least some of their students registered after the first class meeting. (12,570 of 20,458 respondents)

What percentage of the students in your selected course section registered after the first class session? (N=20,458)



Percentages do not total 100% due to rounding.
Source: 2011 *CCFSSE* Promising Practices data.

Registration before Classes Begin

Students who register after the first meeting of a class (late registration) may be decreasing their chances for success before even walking through the classroom door. Late registration correlates with lower grades, lower completion rates, and lower re-enrollment the following term.³ Many colleges, however, continue to permit late registration. Moreover, even colleges with policies forbidding late registration tend to be inconsistent in enforcing them.

Some colleges permit late registration because they do not want to turn interested students away. But colleges do not have to shut the door on late registrants. Instead, they can offer options such as late-start classes or intensive experiences for refreshing academic skills.

Eleven percent of *CCSSE* respondents (26,828 of 238,504) and 8% of *SENSE* respondents (2,629 of 34,266) say they registered after the first class session for at least one class.

Among *CCIS* colleges, 134 respondents report the incidence of late registration. Of these colleges, only 10 (7%) say that no registration occurred after the first class meeting. Among the colleges indicating that they have a policy of prohibiting late registration, 63% (30 of 48) report that they still have some incidence of late registration.



Initiating Success

Accelerated or Fast-Track Developmental Education

“In remedial classes, they need to place you with students who are going to learn at the same pace as you.”

— Student

The longer it takes a student to move through developmental education into a credit program, the more likely he or she is to drop out.⁴ For example, students who place three or more levels below college-level in math, reading, or English can take more than two years to reach and pass their first college-level courses — if, in fact, they ever complete the developmental sequence. Accelerated or fast-track developmental programs can both enhance learning and engagement and help students move into college-level work more quickly.

A growing number of colleges are designing accelerated or fast-track developmental education programs so students can focus on specific, targeted issues for remediation; move through developmental education at their own pace; and most important, move into college-level work more quickly. Research indicates that well-designed accelerated programs are efficient — and that students in these intensive courses perform equally as well, or better than, students in traditional developmental education.⁵

Among the 120 CCIS respondents that have accelerated or fast-track developmental education programs, 13% indicate that they

require these programs for all first-time (full-time and part-time) developmental students. The most prominently cited components of this practice are tutoring, information about and/or use of the college’s academic support network, and basic technology skills (e.g., using the Internet, word processing).

First-Year Experience

“The first-year experience learning community is a big help with the transfer from high school. When I got to class, I [thought], ‘Is this it? It isn’t scary at all.’”

— Student

First-year experience programs create a small community within the larger campus for first-year students, helping them build relationships with other students as well as faculty and staff.

Students who participate in first-year experience programs demonstrate more positive relationships with faculty, greater knowledge and use of campus resources, more involvement in campus activities, and better time-management skills than their non-participating peers.⁶

Of the 166 CCIS respondents that report having first-year experience programs, 27% indicate that they require these programs for all first-time (full-time and part-time) students. The most prominently cited components of this practice are time-management skills, information about and/or use of the college’s academic support network, and information about and/or use of the college’s personal/social support services.





Student Success Course

Student success courses help students build knowledge and skills essential for success in college, from study and time-management skills to awareness of campus facilities and support services. Research indicates that students who complete these courses are more likely to complete other courses, earn better grades, have higher overall GPAs, and obtain degrees.⁷

Of the 238 CCIS respondents that report having student success courses, 15% indicate that they require these courses for all first-time (full-time and part-time) students. The most prominently cited components of this practice are study skills, time-management skills, and note-taking skills.

“Since I’ve never been to college before, I took the class with study skills, writing, and research. It’s everything built into one class. It’s helpful. It is.”

— Student

Learning Community

“Your papers are going to be on Mexican-American history, but you’re still learning the essential skills you need for English 101. It’s a good idea and fun.”

— Student

Learning communities generally involve a group of students taking two or more linked classes together as a cohort, ideally with the instructors of those classes coordinating course outlines and assignments as well as jointly reviewing student progress.

Learning communities build a sense of academic and social community and increase engagement among students and faculty, all of which lead to a variety of positive outcomes. These may include improved academic achievement, as measured by GPA, credit accumulation, and self-reported learning.⁸

The literature suggests that participating students also demonstrate greater progress in academic subjects, indicate increased satisfaction with the college, and report greater use of student support services. Taken together, these characteristics may lead to improved retention and learning outcomes.⁹

Of the 160 CCIS respondents that report having learning communities, only 1% indicate that they require these learning communities for all first-time (full-time and part-time) students. The most prominently cited components of this practice are use of information resources (e.g., library, finding and evaluating sources), study/assignments focused on a common theme, and common readings.

Structured Group Learning Experiences

The Center's Promising Practices initiative describes five of the promising practices — orientation, accelerated or fast-track developmental education, first-year experience, student success course, and learning community — as structured group learning experiences.

Typically, these practices reflect the goal of ensuring that students are successful in the early weeks and then through the first year of college. They can occur at different points in students' entering experiences and extend over differing time periods.

An important step for community colleges is to better understand and describe these practices.

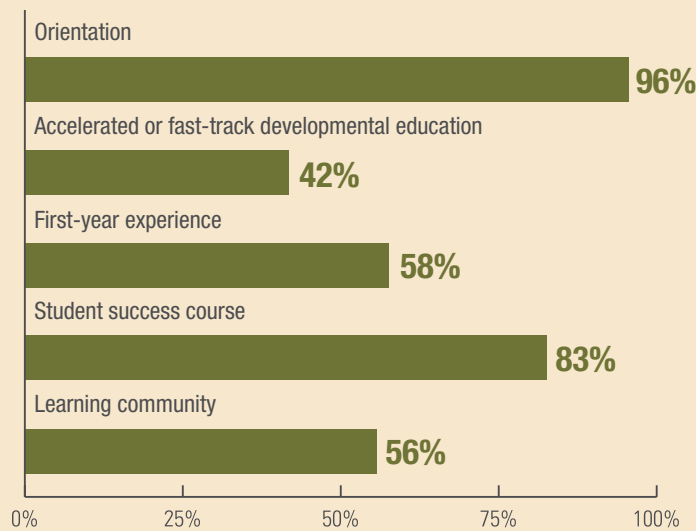
College Responses

CCIS participants ($N=288$) use a variety of approaches to reach their students, and most report using multiple structured group learning experiences: 30% report using three, 27% report using four, and 19% report using all five.

Which Structured Group Learning Experiences Are Colleges Using?

Of the five structured group learning experiences, orientation is the most commonly used among CCIS respondents; accelerated or fast-track developmental education is used least.

Percentage of colleges that report they implement each practice ($N=288$)



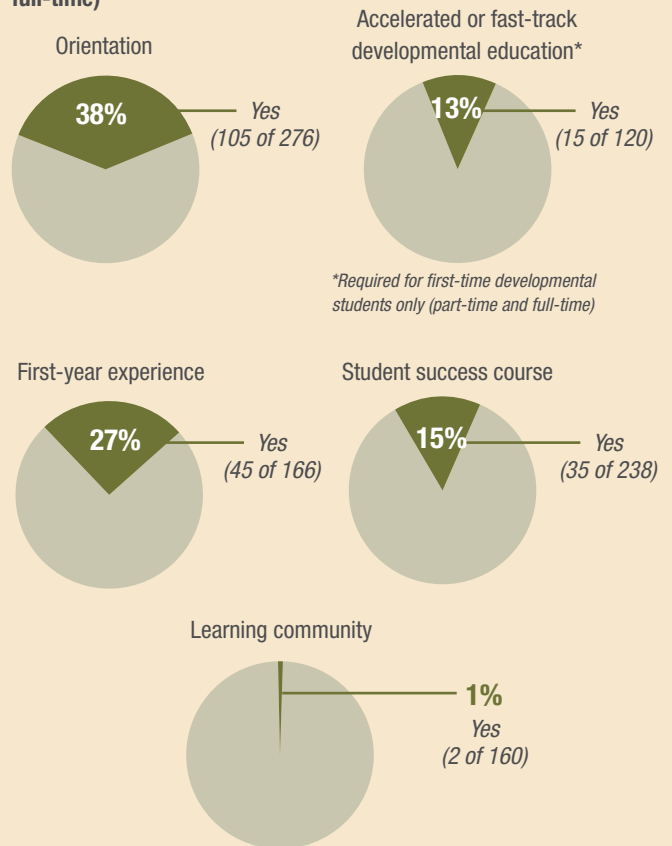
Source: 2011 CCIS data.

How Do Colleges Evaluate the Success of Structured Group Learning Experiences?

CCIS gave colleges a list of 11 types of data and asked the colleges to indicate which types of data they use to evaluate program effectiveness. The most common data types used across all promising practices were **overall course completion rates, fall-to-spring retention, and fall-to-fall retention.**

Do Colleges Make these Practices Mandatory?

Among responding colleges using each practice, the percentage that require the experience for all first-time students (part-time and full-time)

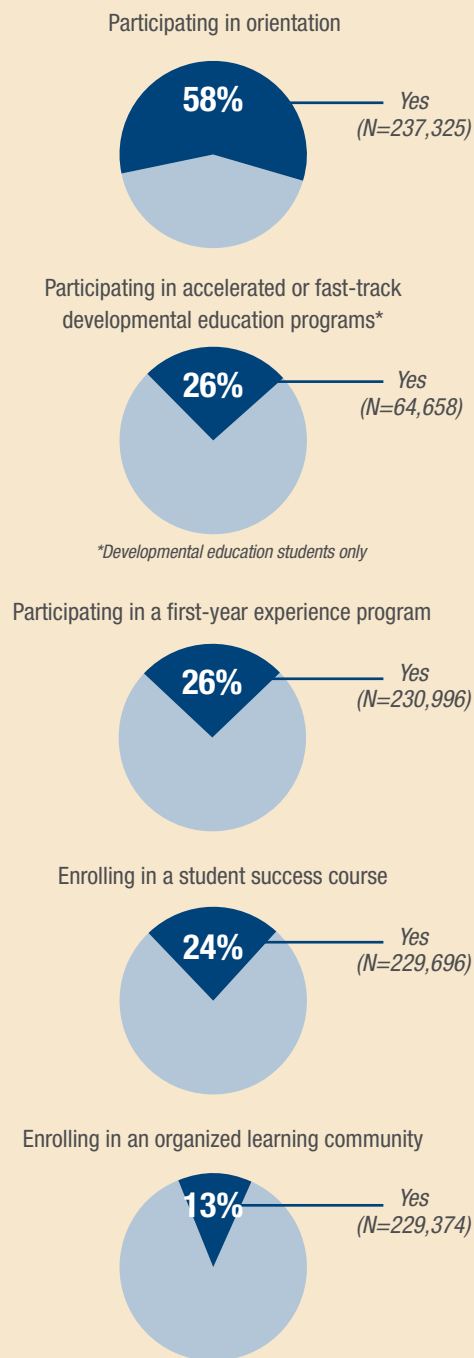


Source: 2011 CCIS data.

Student Responses

Students' Participation in Structured Group Learning Experiences

Percentage of *CCSSE* respondents who report engaging in each experience



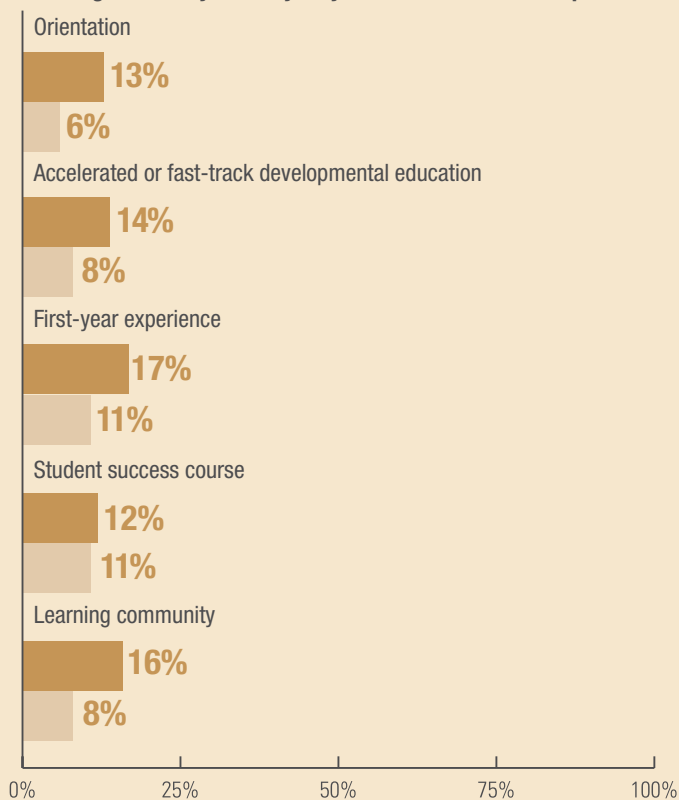
Source: 2011 *CCSSE Promising Practices* data.

Faculty Responses

Full-Time Faculty Members Are More Likely than Part-Time Faculty to Be Involved with Structured Group Learning Experiences

■ Full-time (N=10,972) ■ Part-time (N=11,645)

Percentage of faculty who say they teach or facilitate each practice



Source: 2011 *CCFSSE Promising Practices* data.

“Without taking [developmental education], you can’t even get to the college courses. I’ll probably be in school here three or four years before I get to my nursing program.”

— Student

“I like having classes that are linked. [Even if] you’re moving across the campus for your next class, you work with the same people.”

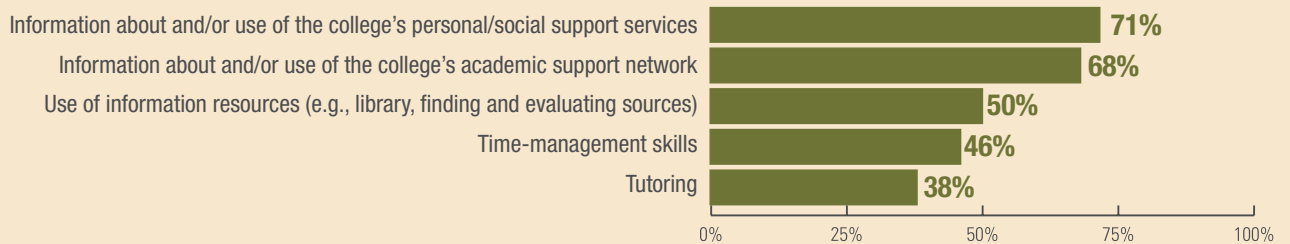
— Student

Components of Structured Group Learning Experiences

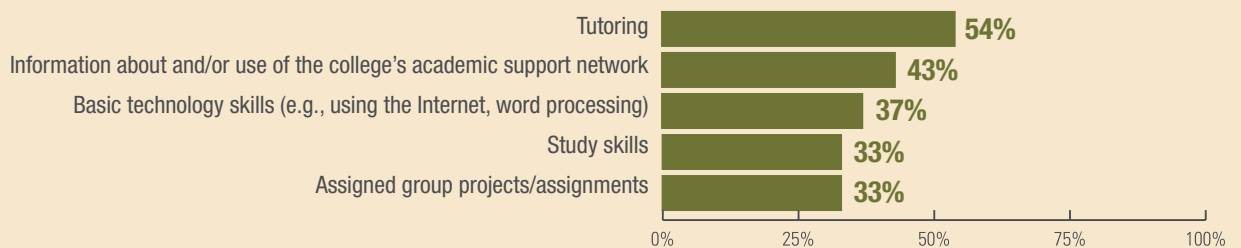
College Responses

CCIS asks colleges about the components they include in each structured group learning experience. The five most frequently reported components for each structured group learning experience are displayed below.

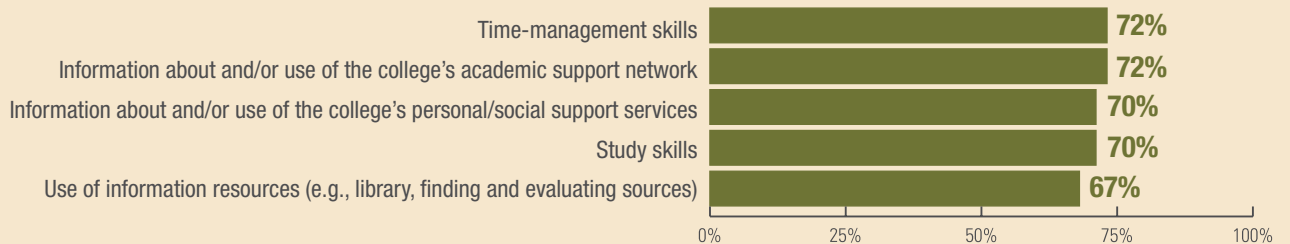
Orientation *Among 276 colleges reporting they have one or more programs*



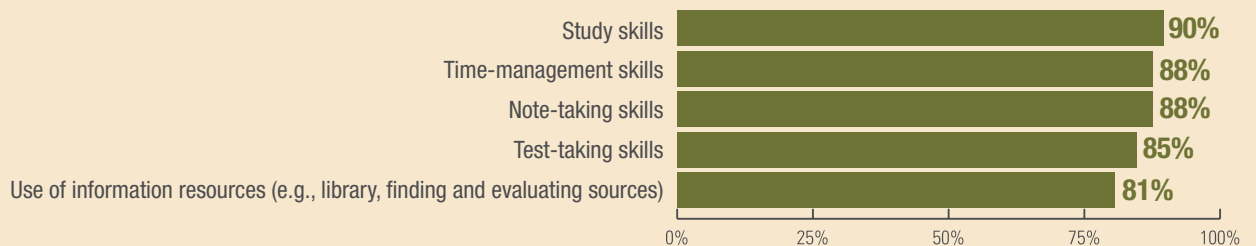
Accelerated or Fast-Track Developmental Education *Among 120 colleges reporting they have one or more programs*



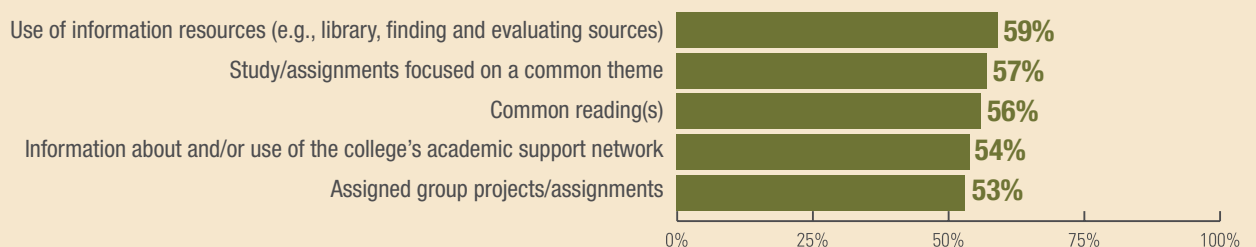
First-Year Experience *Among 166 colleges reporting they have one or more programs*



Student Success Course *Among 238 colleges reporting they have one or more courses*



Learning Community *Among 160 colleges reporting they have one or more programs*



Source: 2011 CCIS data.

Sustaining Success

Class Attendance

“[When I miss class], my English teacher e-mails me and says what we need to do for the next class.”

— Student

Attending class is a key element of succeeding in college, and emerging evidence suggests that class attendance policies have value. For example, researchers have found that students' class attendance is the best predictor of academic performance in college — it more reliably predicts college grades than do high school GPA, SAT scores and other standardized admissions tests, study habits, and study skills.¹⁰

However, more research is needed to explore the effects of attendance policies at community colleges. Seventy-seven percent of *SENSE* Promising Practices respondents (26,401 of 34,072) report that all of their instructors explained a class attendance policy, while only 3% (1,042 of 34,072) indicate that none of their instructors did so. Moreover, about a quarter of *SENSE* respondents (19,033 of 73,649) say they skipped class at least once in the first three weeks of their first term.

“They don't really care if you miss class because that's your fault.”

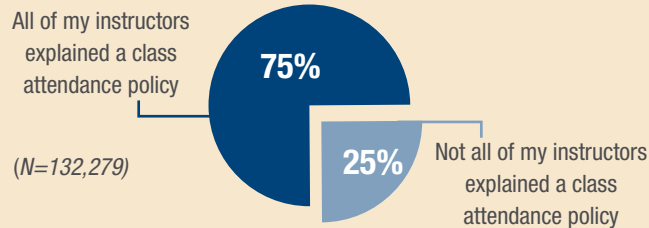
— Student

Class Attendance: Faculty Policies and Student Actions

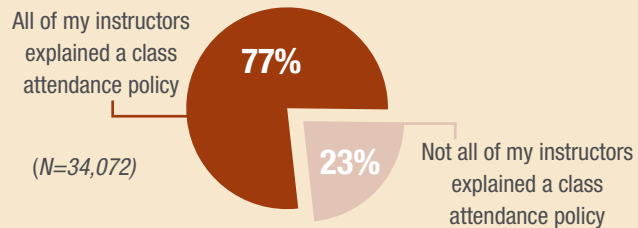
Student Responses

Most Students Report that Instructors Have Attendance Policies

During the current semester/quarter at this college, my instructors clearly explained a class attendance policy that specified how many classes I could miss without penalty.



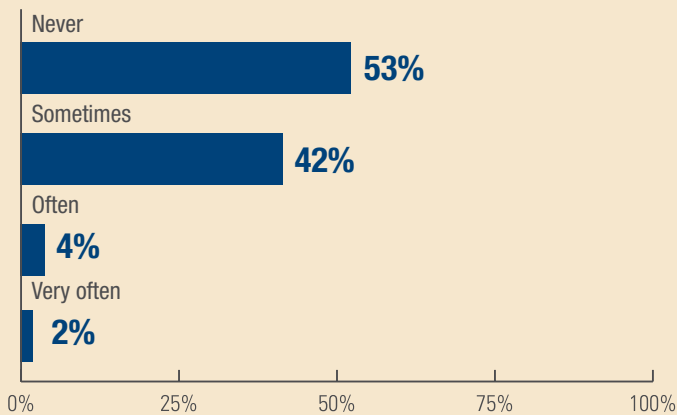
Source: 2011 CCSSE Promising Practices data.



Source: 2011 SENSE Promising Practices data (entering students).

Students Skip Class

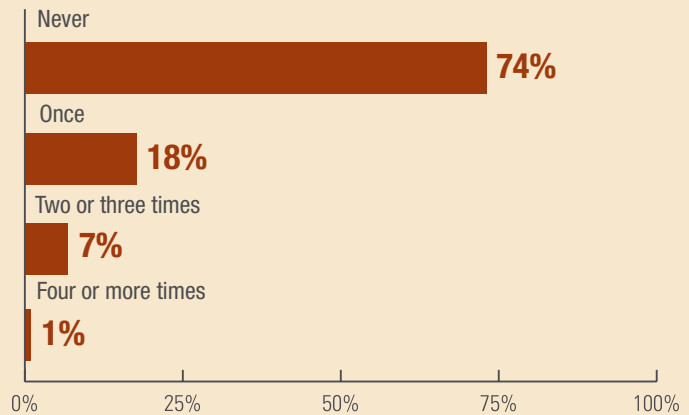
In your experiences at this college during the current school year, about how often have you skipped class? (N=440,980)



Percentages do not total 100% due to rounding.

Source: 2011 CCSSE Cohort data.

During the first three weeks of your first semester/quarter at this college, about how often did you skip class? (N=73,649)



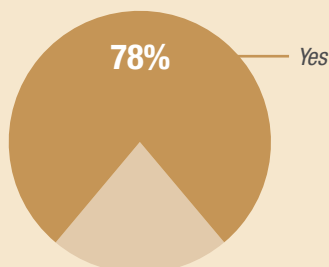
Source: 2010 SENSE Cohort data (entering students).

Class Attendance: Faculty Policies and Actions

Faculty Responses

Attendance Policies

For your selected course section, do you have a course attendance policy that specifies the adverse impact on students' grades for missing class? (N=20,478)

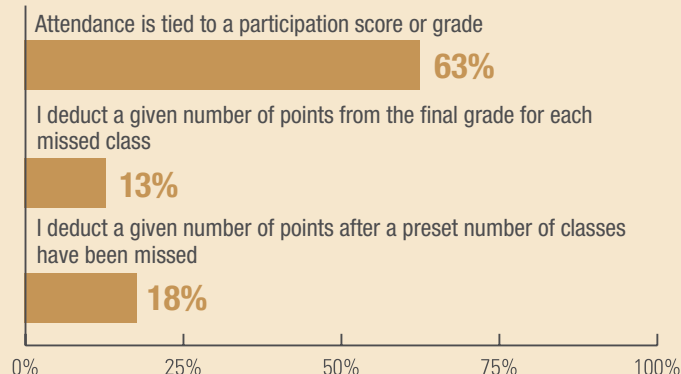


Source: 2011 CCFSSSE Promising Practices data.

How Class Attendance Policies Affect Grades

What is the nature of the adverse impact on students' grades for missing class (not assignment deadlines) in your selected course section? (N=15,984)

Percentage responding yes



Respondents can choose more than one response.

Source: 2011 CCFSSSE Promising Practices data.

Alert and Intervention

“She said, ‘I’m not going to be able to help you individually because I’m so busy.’ I thought, ‘Okay, I’ll just look at it until I understand what’s going on here.’”

— Student

Early academic warning processes typically are triggered when faculty members identify students who are struggling and notify others in the college who step in to support the students. Colleges might follow up with students by e-mail, text, social media, or telephone and encourage them to access services, such as tutoring, peer mentoring, study groups, and student success skills workshops.

Some research suggests that when colleges make students aware of their academic difficulties, students are more likely to successfully complete the course in question and to persist over the long term.¹¹

Only 14% of CCSSE Promising Practices respondents (17,654 of 127,770) say that they have experienced academic difficulties and been contacted by someone at the college, while 27% of faculty (6,186 of 22,617) say that when students are struggling in their classes, they notify someone else in the college who is part of a systematic early

warning system. Faculty may also contact students directly: 67% of faculty (15,113 of 22,617) say that when students are struggling in their classes, they contact the students outside of class, while 63% (14,269 of 22,617) say they communicate with students directly during class.

“I just don’t want to tell him, ‘I don’t know how to do this. I need help.’”

— Student

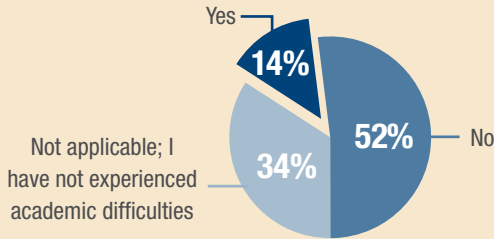


Alert and Intervention: Reaching Out to Struggling Students

Student Responses

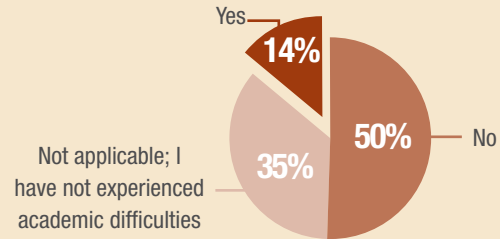
Most Students Have Not Been Contacted by Their Colleges

Someone at this college contacts me if I am struggling with my studies to help me get the assistance I need (N=127,770)



Source: 2011 CCSSE Promising Practices data.

Someone at this college contacts me if I am struggling with my studies to help me get the assistance I need (N=32,750)



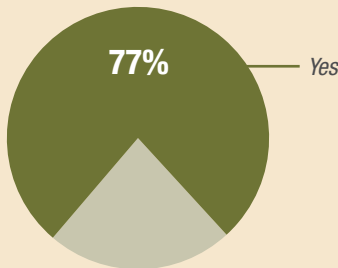
Percentages do not total 100% due to rounding.

Source: 2011 SENSE Promising Practices data (entering students).

College Responses

Most Colleges Report Having Alert and Intervention Processes

Has your institution implemented a systematic early academic warning/early intervention process? (N=181)



Source: 2011 CCIS data.

“I was having a difficult time completing an assignment, so I just e-mailed her, and we ended up talking on the phone, and she helped me through it.”

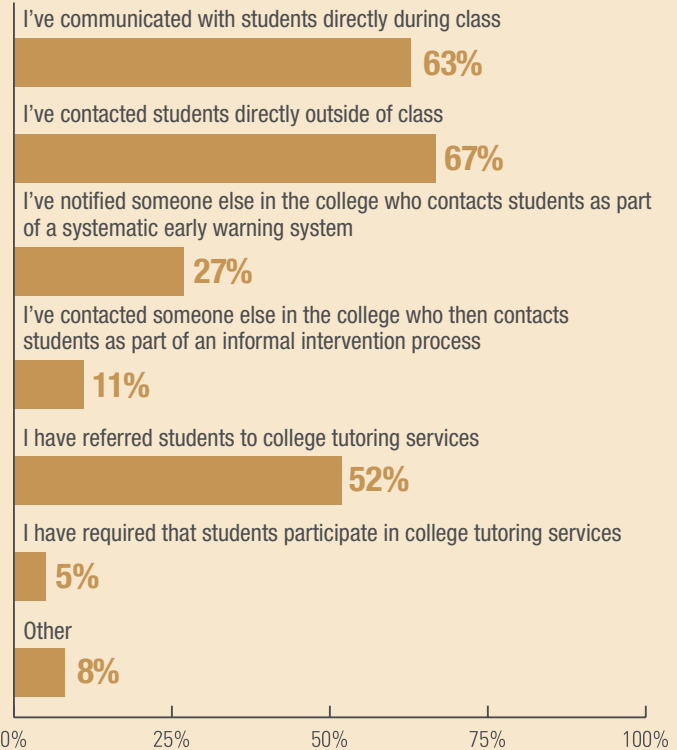
— Student

Faculty Responses

Most Faculty Report Contacting Students Directly

Which of the following statements describe actions you have taken in regard to students who have been struggling academically during the current semester/quarter in your selected course section? (N=22,617)

Percentage replying yes



Respondents can choose more than one response.

Source: 2011 CCFSSSE Promising Practices data.

Experiential Learning beyond the Classroom

Experiential (hands-on) learning, such as internships, co-op experience, apprenticeships, field experience, clinical assignments, and community-based projects, has multiple benefits. It steeps students in content, and it encourages students to make connections and forge relationships that can support them throughout college and beyond.

More than three-quarters of CCSSE respondents (77%, 338,987 of 438,716) say they have not participated in a community-based project as part of a course. Thirteen percent of faculty (2,653 of 20,301) report requiring students to be involved in an internship or other hands-on-learning experience. In turn, 15% of students (65,901 of 433,341) say they have had such experiences as part of coursework.

Forty-five percent of students (194,590 of 433,341) express interest in having these experiences by noting that they plan to undertake them. Realizing these plans, however, might not be possible given available college resources and offerings.

“I’m in radiology, and now I’m at the hospital three days a week, working like a regular employee. It’s unbelievable that about a year ago, coming out of high school, I didn’t know any of that.”

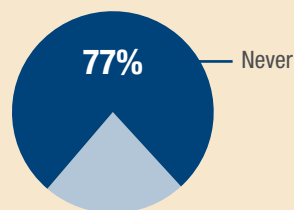
— Student

Experiential Learning

Student Responses

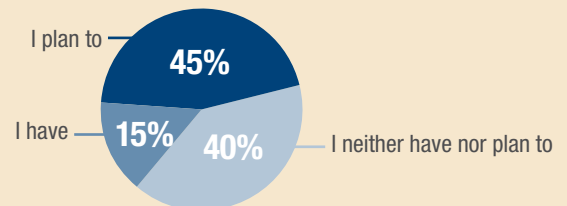
Few Students Participate in Experiential Learning

In your experiences at this college during the current school year, about how often have you participated in a community-based project as part of a regular course? (N=438,716)



Source: 2011 CCSSE Cohort data.

Student responses regarding participating in an internship, field experience, co-op experience, or clinical assignment (N=433,341)

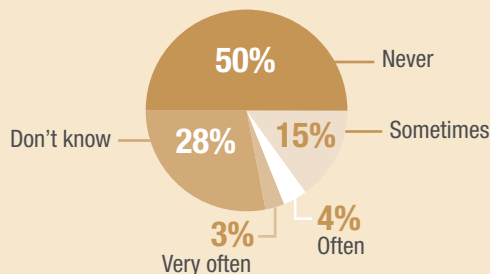


Source: 2011 CCSSE Cohort data.

Faculty Responses

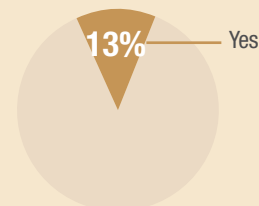
Most Faculty Don't Require Hands-On Learning

How often do students in your selected course section participate in a community-based project as part of a regular course? (N=36,793)



Source: 2011 CCFSSSE Cohort data.

In your selected course section, do you require students to be involved in an internship, apprenticeship, clinical placement, or other hands-on-learning experience beyond the classroom? (N=20,301)



Source: 2011 CCFSSSE Promising Practices data.

Tutoring

“Tutors walk you through your problem, and they don’t make you feel stupid if you don’t understand something.”

— Student

Studies suggest that participation in tutoring is associated with higher GPAs and pass rates.¹² For many colleges, the good news is that tutoring can be offered in multiple ways and provide a range of benefits in terms of student engagement. For example, group tutoring can build relationships among students; one-on-one tutoring often serves both tutor and tutee; and technology-enhanced tutoring can

maximize resources by focusing assistance where it’s needed while helping to build students’ engagement with the subject matter itself.

Even though 73% of *CCSSE* respondents (N=403,333) indicate that tutoring is *somewhat* or *very important* and 80% of *CCFSSE* respondents (N=35,299) report *sometimes* or *often* referring students to tutoring, only about one-quarter of students (N=130,147) report ever participating in tutoring.

“My grades are good because I go [to the tutoring center] whenever I have free time.”

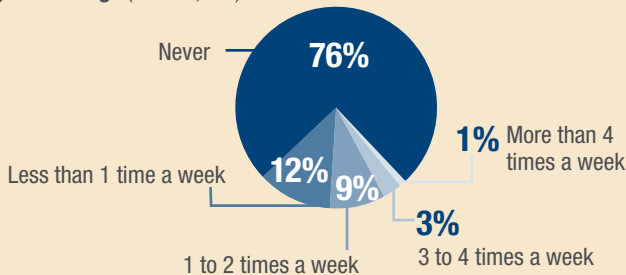
— Student

Tutoring Referral and Use

Student Responses

Few Students Participate in Tutoring

During the current academic year, I participated in tutoring provided by this college (N=130,147)



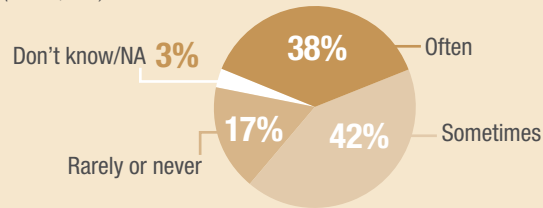
Percentages do not total 100% due to rounding.

Source: 2011 *CCSSE Promising Practices* data.

Faculty Responses

Most Faculty Report Referring Students to Tutoring

How often do you refer students to peer or other tutoring? (N=35,299)



Source: 2011 *CCFSSE Cohort* data.

Supplemental Instruction

“Anybody can come to [supplemental instruction]. You go over material that’s been discussed in class. I got to meet great people, and we formed our own study group to help even more. It really saved me big time.”

— Student

While tutoring usually is conducted one-on-one, supplemental instruction typically involves a regularly scheduled, supplemental class for a portion of students enrolled in a larger course section. Supplemental instruction may be taught by the class instructor or a trained assistant, often a former student who was successful in the class.

Supplemental instruction, like tutoring, may increase the impact of classroom instruction by providing extra time for skill practice. Studies indicate that students participating in supplemental instruction earn higher grades than their peers who did not participate.¹³

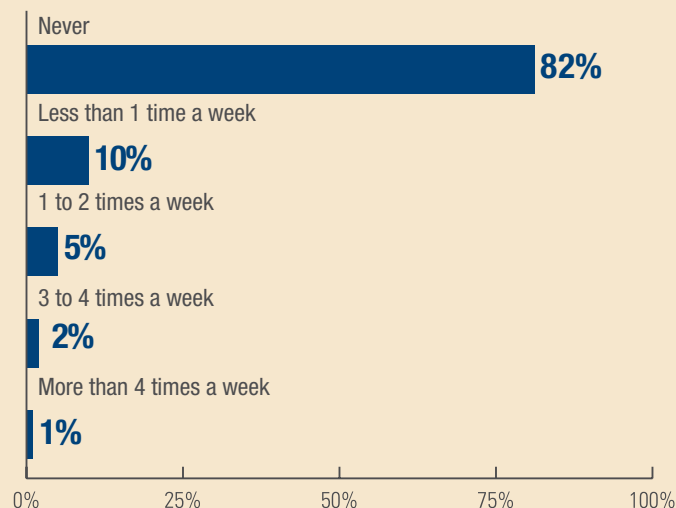
Students’ actions with regard to tutoring and supplemental instruction tend to be responsive to requirements. Among faculty who say supplemental instruction is available in their classes (N=8,802), 19% require supplemental instruction for all or some students, while 81% make participation optional for all students. Student responses (N=130,118) show that 18% of students participated in some supplemental instruction, while 82% never did so.

Supplemental Instruction

Student Responses

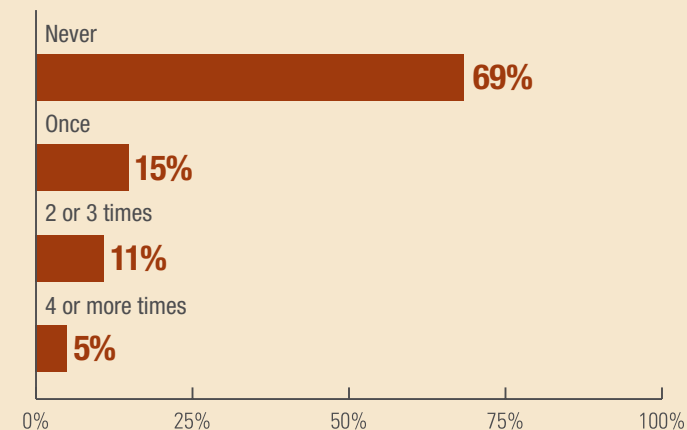
Few Students Participate in Supplemental Instruction

During the current academic year at this college, I participated in supplemental instruction (N=130,118)



Source: 2011 CCSSE Promising Practices data.

During the first three weeks of your first semester/quarter at this college, about how often did you participate in supplemental instruction? (N=73,728)

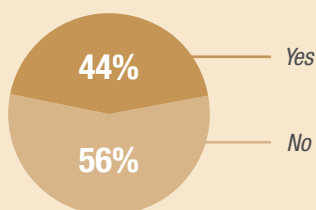


Source: 2010 SENSE Cohort data (entering students).

Faculty Responses

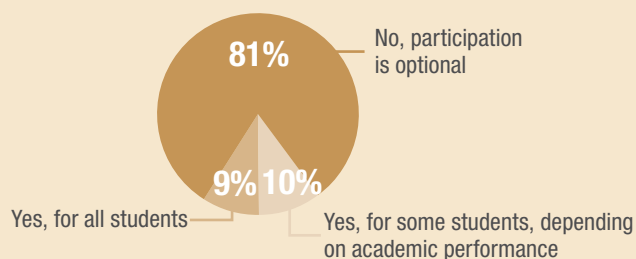
Few Faculty Require Supplemental Instruction

In your selected course section, is supplemental instruction available to students? (N=20,302)



Source: 2011 CCFSSSE Promising Practices data.

Among faculty who replied *yes* to the question at the left: In your selected course section, do you require students to be involved in supplemental instruction? (N=8,802)

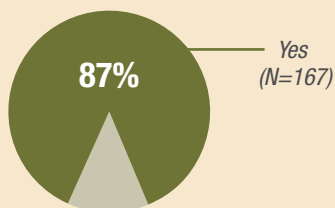


Source: 2011 CCFSSSE Promising Practices data.

College Responses

Most Colleges Report Offering, but Not Requiring, Supplemental Instruction

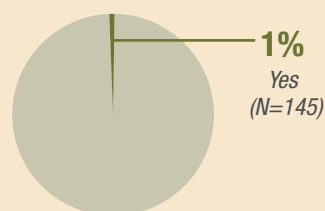
Colleges that report offering supplemental instruction in any classes



Source: 2011 CCIS data.

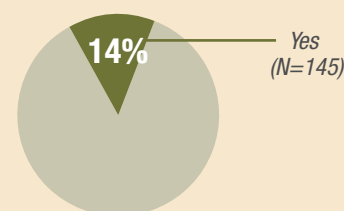
Among colleges that offer supplemental instruction, the percentage that require it

Supplemental instruction is mandatory for all first-time students (full-time and part-time)



Source: 2011 CCIS data.

Supplemental instruction is mandatory for all developmental education students



Designing Practices for Student Success

Many colleges are implementing one or more promising practices — and seeing dramatic gains in student retention and success.

Student Success Course

In fall 2007, **Brazosport College (TX)** began requiring all first-time-in-college students to take Learning Frameworks, a student success course that focuses on developing academic and personal skills, enhancing study skills, and helping students set goals. Students in the 2007–2009 cohorts who successfully completed the course had an average fall-to-spring retention rate of 89%, compared to a baseline of 66%; they successfully completed transitional reading at rates of 90% to 97%, compared to a baseline of 66%; and they successfully completed transitional writing at rates of 77% to 95%, compared to a baseline of 72%. In addition, 78% of Learning Frameworks students in the 2009 cohort successfully completed pre-algebra, compared to a baseline of 57%. Students who successfully completed Learning Frameworks, moreover, were more likely to succeed in developmental coursework, more likely to succeed in gatekeeper courses, more likely to be retained, and less likely to withdraw.



Academic Planning

The GPS LifePlan (Goals+Plans = Success) at **Century College (MN)** helps students make intentional connections with the college and gives them tools for success. The GPS website has links to resources that help students develop goals and plans related to career, education, finance, leadership, and personal development, and it helps students maintain an eFolio (electronic portfolio) to track and reflect on activities completed.

GPS is integrated into the college curriculum through the college's New Student Seminar as well as developmental reading courses, learning communities, and other classes. More than 100 faculty members have incorporated GPS in more than 40 courses throughout the campus.

An independent evaluation of GPS found that first-time entering students' fall-to-fall persistence increased from 60% to 64% after the

first full year of GPS LifePlan implementation. New full-time cohorts of students using GPS had fall-to-spring retention rates of 81%, compared to overall fall-to-spring retention of 72%. The evaluation, which also showed a high level of awareness and use among faculty and students, included data analysis; focus groups with faculty, students, and staff; and individual interviews with every member of the campus leadership team.

Registration, Academic Planning, and Orientation

Analysis of *CCSSE* and *SENSE* results — and significant input from faculty — led **Chipola College (FL)** to implement five policy changes: (1) abolishing late registration so students are not programmed to fail before they begin; (2) scheduling a mandatory 45–60 minutes for entering students' initial advising sessions; (3) allowing students to register earlier to assist in planning for family and work commitments; (4) offering orientation taught by faculty during the summer before the fall semester starts; and (5) renaming Curriculum Guides to Academic Plans so students will recognize them as clearly laid out plans leading to graduation.

Also, over a five-year period, the college offered five one-day mandatory faculty workshops and three optional paid summer institutes for full-time and adjunct instructors. During these workshops and institutes, faculty became increasingly focused on promoting student persistence.

Between 2005 and 2009, the time period when the college implemented these measures, the college's performance on two *CCSSE* benchmarks, student-faculty interaction and support for learners, increased sharply. Over the same time period, *CCSSE* data on individual survey items also showed an increase in students' perceptions that they received the support they needed to help them succeed. Finally, three-year graduation rates of associate degree-seeking students improved. For example, 24% of associate degree-seeking students who started in fall 2002 graduated in three years, compared to 31% of such students who entered in fall 2006.

First-Year Experience

The **College of the Sequoias (CA)** has a long history of serving first-generation, low-income Hispanic students. The college's First-Year Experience (FYE) program is the umbrella of student support that includes intrusive counseling, peer mentoring, learning communities, and augmented instruction. Augmented instruction, a mandatory component of the FYE math course, adds an additional two hours of math with the instructor and tutor each week. All instructors in the FYE math and English programs are full-time faculty.

From fall 2009 to fall 2010, FYE developmental math students who received augmented instruction had a 6% increase in success compared to no improvement for FYE developmental math students who did not receive augmented instruction. Success is defined as passing with a C or higher.

In the same time period, FYE students' success rates in developmental English (two levels below college-level) increased from 57% in fall 2009 to 63% in fall 2010, as compared with an increase from 49% in fall 2009 to 59% in fall 2010 for all new students.

Retention rates for developmental English students participating in the FYE rose from 90% in fall 2009 to 92% in fall 2010, as compared with a steady 87% retention rate for non-FYE students.

In addition, pilot data on the college's innovative augmented instruction model indicate up to 20% improvement in course success rates and 10% improvement in retention rates for FYE students compared to the general new student population.

Required Orientation and College Success Course

In 2006, **Durham Technical Community College (NC)** took multiple steps to improve its 69% first-to-second-semester retention rate. The college began to require all first-time-in-college students — full-time and part-time students with fewer than 12 successful college credit hours — to attend a pre-enrollment orientation and to enroll in a college success course. The two experiences help new students understand enrollment and other college processes, manage the college's online systems, develop skills, explore career choices, draft a specific degree-completion plan, connect with campus resources, and build relationships.

The college now has data for four cohorts (2007–2010), and persistence has improved each year. The 2007 cohort's first-to-second semester persistence rate was 73%. Nearly nine in 10 students in the 2010 cohort (89%) persisted into the second semester.

The college plans to continue these interventions and to add others, such as required placement testing preparation and automated registration to ensure correct course placement, to improve entering students' experiences.

Early Assessment

In fall 2008, **Howard Community College (MD)** launched a partnership with the Howard County Public School System to assess 11th graders and better prepare them for college. The program began with administering reading and writing placement tests for all 11th grade students, except those enrolled in honors, Advanced Placement, or gifted and talented courses. These students also met with their high school guidance counselors and the college's English faculty to discuss college readiness in conjunction with grades and overall high school performance.

After the testing, the county's public school system used the college's developmental curriculum to infuse developmental objectives into its classes. Thus, students who were not college ready (per their test scores) were given the opportunity to become ready during their senior year. High schools also added a senior-year writing project and an oral presentation to their curriculum.

Two years after the program began, students who went from the public school system to the college had an 80% fall-to-spring retention rate, as compared with 56% for all first-time freshmen. In addition, 40% placed into both college-level reading and

writing, as compared with 36% for all first-time freshmen, and 73% improved their scores, compared to results from the test they took in high school.

Developmental Education Completion

After reviewing *CCSSE* and *SENSE* data and conducting student focus groups, **Lee College (TX)** determined that better student engagement was critical to improve completion rates in developmental education. The college adopted a three-pronged approach that centered on redesigning courses, improving faculty development, and expanding student support services.

The college's specific strategies included (1) requiring a learning strategies course for all new students whose placement scores indicate a need for two or more areas or levels of remediation; (2) offering fast-track remedial courses in reading, writing, and math; (3) eliminating late registration so faculty can implement first-week engagement activities in their courses; (4) requiring orientation for all students new to the college; and (5) requiring financial aid orientation for all students eligible to receive federal assistance.

In addition, faculty participated in professional development including student success strategies workshops. Faculty, staff, and administrators participated in the Center's Entering Student Success Institutes in 2008 and 2011.

To improve student support, a counselor is dedicated to developmental education, and her office is located in the center of the building where students take developmental education classes. She visits with each developmental class, and students are required to make contact with her each semester.

Between 2006 and 2011, developmental success rates in 16-week courses increased from 44% to 59% in fundamentals of writing, 42% to 50% in intermediate algebra, and 67% to 70% in advanced college reading skills. Fast-track developmental courses have shown consistently higher success rates in math and reading, while results were mixed in writing.

Moreover, from 2003 to 2007, the percentage of students completing degrees and certificates within three years increased for all students (from 11% to 19%) as well as among African Americans (10% to 13%), men (13% to 17%), and 18- to 25-year-olds (11% to 16%).

Scaling Up a New Instructional Approach

When **Montgomery County Community College (PA)** wanted to improve success rates for students placing into developmental math, the college redesigned its instructional approach. The college maintained two levels of developmental math (a basic arithmetic-review level and a college-preparatory-math level) but changed the curriculum and teaching style for both. The newly designed curriculum uses a conceptual approach and centers on creating active learners. For example, rather than the traditional means of teaching arithmetic — presenting definitions, providing examples, and doing practice problems — instructors ask students to figure out the process for solving problems. This approach makes students active participants in their own education and better engages them.

In fall 2008, the college piloted the new approach in the basic arithmetic course with 19 students, and 74% completed the course with a C or better, compared with just 45% of similar students in traditional developmental math. In spring and fall 2009, the college continued with one pilot class each semester at the basic arithmetic level, and students in these pilot classes had higher success rates than their peers. In spring 2009, 63% of students in the pilot passed with a C or higher compared with 34% of students in traditional developmental math. In fall 2009, 68% of pilot students succeeded, compared with 44% of their peers.

In spring and fall 2009, instead of placing all students with an Accuplacer score of 20–74 in the basic arithmetic class, the college decided to place students who had a score of 65–74 in the newly designed college-preparatory developmental math course. The new course combined basic arithmetic review with college-preparatory developmental math. The college recorded higher success rates for students in this class than for students in traditional college-preparatory developmental math.

Based on these promising results, MCCC trained additional faculty in the new approach and continued to make changes based on data. In spring 2010, the college enrolled half of all students placing in the basic arithmetic developmental math course in the redesigned classes.

In fall 2010, the college again expanded the scale of the developmental math program by further lowering the cut scores: All students scoring 55–74 on their math placement tests were placed in college-preparatory developmental math. Even with this lower cut score, students in the redesigned college-preparatory class had a 58% success rate (N=380), compared with a 40% success rate (N=284) for students in traditional developmental math. With these results, starting in fall 2011, all basic arithmetic classes began using the new approach, and all students scoring 55–74 on their placement tests are enrolled in the redesigned college-preparatory math course.

Professional Development for Adjunct Faculty

Faculty at **Sinclair Community College (OH)** created an Adjunct Faculty Certification Course, which helps adjunct instructors learn and practice effective teaching methods. Participants also can accelerate their progress from Lecturer I to Lecturer II (and to higher pay) if they demonstrate competency in five key areas.

The course gives adjunct faculty a toolbox of presentation techniques, active learning strategies, knowledge of the campus and student

support systems, and knowledge of FERPA and other policies. It also includes peer reviews of their classroom performance and mentoring from other faculty members. The course is given in five sessions: The First Day of Class, FERPA/Ethical and Legal Issues, Active Learning and Critical Thinking, Presentation Techniques, and Student Support Services.

The certification course has been positively received by department chairs and adjunct faculty alike. Since the course teaches about pedagogy, it offers crucial support to a majority of the college's instructors, and it frees up the department chairs for other duties. Adjunct faculty are requesting additional sections of the course, and the college is developing a new advanced track so professional development can continue.

It is too early to evaluate results, but the college expects that having better-prepared part-time faculty will improve student success.

Centralized Academic and Technical Support with Faculty Engagement

The William J. Law Jr. Learning Commons at **Tallahassee Community College (FL)** centralizes learning and technology support and provides resources for all students across the curriculum. Students taking classes from developmental studies through sophomore courses receive individual and small-group tutoring in a broad range of subject areas, technology instruction, assistance with research and information literacy, and counseling. They have access to technology, group study spaces, and a wide range of print and online resources.

Faculty engagement is key to the program's success. Many faculty members have scheduled office hours in the Learning Commons and provide professional support for students and learning specialists. Faculty and staff collaborate to help students master content, develop effective learning strategies, strengthen their technology skills, and use resources. In addition, counseling staff, learning specialists, and faculty collaborate to develop Academic Success Plans for students with academic challenges.

The Learning Commons provided a dramatic change in student support at Tallahassee. Before it opened, learning support was fragmented and accessed by a small percentage of students. In its first three years, the number of individual students served grew from 7,200 students in fall 2008 to 11,300 students in fall 2010. During that same period, the number of unique courses served increased, as did the number of logged individual visits. As important, the percentage of full-time faculty with scheduled time in the Learning Commons increased from 15% in 2008 to nearly 40% in 2010.

Students who use the Learning Commons are more successful in their courses and persist at higher rates than students who don't use it. Among students taking the college's 20 classes with the highest enrollment, students who used the resources four or more times had a 9% higher success rate in fall 2010 and a 17% higher success rate in spring 2011. Differences for developmental students were even more dramatic. The number of students successfully completing classes increased 25% in fall 2010 and 35% in spring 2011. Success is defined as passing with a C or higher.



Retention rates also are higher among students who regularly use the Learning Commons. In the fall 2008 cohort, fall-to-spring retention was 9% higher among students who visited the Learning Commons four or more times and 8% higher among students who had one to three visits than among students who never visited. Fall-to-fall retention for fall 2009 was 29% higher for students who used the resources four or more times, and 27% higher for those using the resources one or more times.

Graduation rates for the first-time-in-college fall 2008 cohort (N=2,415) also show a positive effect related to participating in the Learning Commons. The three-year graduation rate for students using the resources of the Learning Commons was 41%, compared to 7% for students who never used the resources.

Centralized Academic Support

West Kentucky Community and Technical College (KY) replaced its tutoring center with an Academic Support Center to better meet the needs of the college's growing number of underprepared and at-risk students. The new center provides supplemental instruction and trains its tutors with consistent guidelines. Students are encouraged to study at the center, schedule appointments for tutoring, and attend sessions that address test anxiety, organizational skills, note taking, and other issues.

Since the opening of the Academic Support Center, the college has had a 10% increase in retention during a period of steady growth in its student population. The Academic Support Center is working with 1,000 of the college's nearly 4,000 credential-seeking students. In fall 2010, the college evaluated its tutoring services by comparing the performance of students tutored in the Academic Support Center with that of students in the same course sections (students who received the same classroom instruction but did not receive tutoring). The results: 60% of the students who received tutoring successfully completed their courses, compared with 54% of their peers who did not receive tutoring.

Registration and Orientation

In fall 2009, **York Technical College (SC)** ended its practice of late registration and began requiring students to register for credit courses prior to the first class meeting. Before this change, students could register for credit courses until the last day of the first week of classes. To accommodate students who do not register on time, the college now offers some of its more popular courses in eight- and 12-week mini-courses that begin later in the semester. The college credits the new registration policy — and its fall 2010 mandate for all credit-seeking students to attend orientation — with its increased scores on all *SENSE* benchmarks.

In addition, in fall 2011, the college required all entering credit students to attend an orientation session. Then, after meeting with a college admissions counselor, students were invited to attend an orientation session specific to the department of their program of study. These sessions helped entering students understand the requirements of their programs and gave them opportunities to interact with their advisors, faculty, and fellow students.

With these strategies in place, the college scored 63 (relative to a standardized national average of 50) on the early connections *SENSE* benchmark. Students' responses to individual *SENSE* survey items support the conclusion that these practices have a positive effect on early student engagement. For example, the percentage of students who *agree* or *strongly agree* that they were assigned a specific person to see for information increased from 41% to 55%. In addition, the percentage of students who report that they never worked with other students on a project during class decreased from 27% to 17%.

Intrusive Advising for At-Risk Students

Zane State College (OH) introduced intrusive advising to boost fall-to-fall retention among at-risk and underprepared students. The college chose to focus on these students because of data indicating that students who successfully complete their first year, even developmental education students, have a nearly 90% likelihood of graduating on time (within three years).

The college's intensive advising efforts, all designed to foster personal connections with students, included personal phone calls, mandatory meetings, e-mails, and Facebook postings. The ongoing interaction allowed advisors to redirect course registrations when needed and remind students of peer and professional tutoring, writing workshops, and other services. At the same time, the college introduced mandatory assessment and placement, mandatory orientation, and a mandatory first-year experience course.

These efforts have resulted in increased retention of at-risk students as well as higher completion rates for developmental education courses. For example, in 2006, first-to-second-term retention among at-risk students was 77%. In 2009, that figure rose to 82%. In addition, fall-to-fall retention of those students deemed most at risk has increased by 10%–16% over the 2006 baseline, with the 2008 and 2009 cohorts persisting at rates equal to or better than their less at-risk peers. Overall, Zane State's year-to-year retention has improved by 6%.

Developmental education students showed pronounced improvements in all subject areas. In 2004, 44% of students completed their developmental English sequences in their first year, compared with 67% who did so in 2009. In the same time period, developmental math completion rates rose from 14% to 35%, and developmental reading completion rates rose from 46% to 59%.



Next Steps for the Center and Colleges

Next Steps for the Center

The initiative — Identifying and Promoting High-Impact Educational Practices in Community Colleges — is ongoing. CCIS will be administered again in 2012, and all community colleges are invited to participate. In addition, the special-focus items about promising practices will again be included in *CCSSE*, *CCFSSE*, and *SENSE* administrations. The next phase of Promising Practices data analysis will explore the relationship between student participation in the practices and (1) the *CCSSE* and *SENSE* benchmarks; (2) individual *CCSSE* and *SENSE* student engagement items; (3) self-reported student outcome measures from *CCSSE* and *SENSE*; and (4) matched student-record outcome data, such as grades, retention, course completion, and graduation. This research will be presented in a subsequent report to be published in 2013.

“All these experiences require resources that most of our institutions don’t have. We need to re-channel, stop doing some of the things we are doing now that aren’t working well. It is easy to say, but hard to do.”

— George Kuh

*Chancellor’s Professor Emeritus
Indiana University, Bloomington*

Next Steps for Colleges

Colleges have a growing body of evidence about what works, and they may have to look at things in new ways to make changes that are critical for success. There are no easy answers and no silver bullets. Real solutions only come with honest, unflinching evaluation of programs and practices — and a commitment to focus resources on efforts that are part of coherent educational pathways for students.

Using this report as a guide, colleges can evaluate their own use of promising practices. The recommendations below can guide discussions among administrators, faculty, staff, and students.

Look for Incongruities

Look for incongruities in the data presented in this report and determine if these (or others) apply to your college. Use that information to prompt courageous conversations about what outcomes are most important to your college — and what changes will result in them. For example:

- **Can more students test out of developmental education?** 74% of students report that they were required to take a placement test, but only 28% say they used materials provided by the college to prepare for those tests. Smaller percentages report participating in an intensive skills brush-up experience. At the same time, 44% of colleges report offering some sort of test preparation, but only 13% make test preparation mandatory.
- **Are students getting the academic support they need?** 72% of students who took a placement test report that they needed

developmental education, but 82% of students say they never participated in supplemental instruction and 76% say they never participated in tutoring. At the same time, 87% of colleges report that they offer supplemental instruction, but only 14% make it mandatory for developmental education students.

- **Does academic planning set students up for success?** 42% of part-time students and 19% of full-time students work more than 30 hours per week. More than half care for dependents. But only 26% of entering students say a staff member talked with them about their commitments outside of class to help them figure out how many courses to take.

Evaluate Current and New Programs

- Inventory current practices. What practices does the college use? What do data reveal about their effectiveness? At what level of scale are they implemented? For what target student populations?
- Disaggregate the data and determine how effectively college programs are serving different student groups, paying close attention to underprepared students and students who are traditionally underserved.
- Choose what to care about and then how to leverage resources. If everything is a priority, then nothing of significance gets done. Given limited resources, colleges must identify the intentionally designed experiences that will have the largest possible positive impact on the largest possible number of students.
- Using evidence, identify programs that should be scaled up and programs that should be modified or discontinued. How can resources be reallocated to strategies that hold greater promise?
- Think about how multiple practices can reinforce one another. In most cases, multiple practices must work in concert to generate significant change.
- Make the most of finite opportunities to engage students. For each course, colleges and faculty typically have about three hours per week with their students. What is the best way to capitalize on that time?

Resources for Colleges

A growing collection of resources created by the Center can help colleges in their work to continuously strengthen student engagement.

The Center works in partnership with member colleges through a combination of local, state, and national institutes; conference presentations; publications; webinars; and other online tools. Always, the goal is to help practitioners understand their data and use those data to make informed decisions about how best to redesign and improve students’ educational experiences.

The Center provides a variety of resources through its website, including communication tools, accreditation tools that map Center survey items to regional accreditation standards, and focus group tools.

Overview of the Respondents

The 2011 CCSSE and CCFSSSE Cohorts

Each year, CCSSE is administered in the spring during class sessions at CCSSE member colleges. All institutions that participated in the CCSSE administration are invited to participate in CCFSSSE, which is administered online. At colleges that choose to participate in CCFSSSE, every faculty member teaching credit classes in the spring term is eligible to respond to the survey.

CCSSE and CCFSSSE data analyses from the main survey use a three-year cohort of participating colleges. Using a three-year cohort increases the number of institutions, students, and faculty in the national data set; optimizes representation of institutions by size and location; and therefore, increases the stability of the overall results. The 2011 CCSSE Cohort and the 2011 CCFSSSE Cohort include all colleges that participated in CCSSE and CCFSSSE from 2009 through 2011.

- Nearly 444,000 students from 699 institutions in 48 states and the District of Columbia, five Canadian provinces (Alberta, British Columbia, Nova Scotia, Ontario, and Quebec), Bermuda, and the Northern Marianas are included in the 2011 CCSSE Cohort.
- 2011 CCSSE Cohort member colleges in the United States enroll a total of 5,109,690 credit students — approximately 67% of the total credit-student population in the nation's community colleges.
- Of the 699 participating colleges, 313 (45%) are classified as small (up to 4,499 students), 185 (26%) as medium (4,500–7,999 students), 125 (18%) as large (8,000–14,999 students), and 76 (11%) as extra large (15,000 or more students). Nationally, 48% of community colleges are small, 23% are medium, 18% are large, and 12% are extra large.
- According to the Carnegie Classifications,¹⁴ the 2011 CCSSE Cohort includes 149 (21%) urban-serving colleges, 149 (21%) suburban-serving colleges, and 401 (57%) rural-serving colleges. Fall 2009 data indicate that among all U.S. community colleges, 18% are urban, 20% are suburban, and 62% are rural.
- 2011 CCSSE Cohort respondents generally reflect the underlying student population of the participating colleges in terms of gender and race/ethnicity. Part-time students, however, were underrepresented in the CCSSE sample because classes are sampled rather than individual students. (About 27% of CCSSE respondents are enrolled part-time, and 73% are enrolled full-time. IPEDS reports the national figures as 59% part-time and 41% full-time.) To address this sampling bias, CCSSE results are weighted by part-time and full-time status to reflect the institutions' actual proportions of part-time and full-time students.
- 2011 CCSSE Cohort respondents are 57% female and 43% male. These figures mirror the full population of CCSSE Cohort community college students.

- 2011 CCSSE Cohort respondents range in age from 18 to 65 and older.
- CCFSSSE respondents generally mirror the national two-year college faculty population. The notable exception is employment status: Nationally, 33% of two-year college faculty members are employed full-time, and 51% of 2011 CCFSSSE Cohort respondents indicated they are employed full-time.¹⁵
- The special-focus items on promising practices were administered in 2011 only. Data on those items come from 2011 CCSSE or 2011 CCFSSSE respondents.

The 2010 SENSE Cohort

In this report, SENSE data include only entering students — students who indicate that it is their first time at their college. The 2010 SENSE Cohort includes all colleges that participated in SENSE in 2009 and 2010.

- The 2010 SENSE Cohort includes approximately 75,000 entering students from 172 institutions in 35 states plus the District of Columbia and the Northern Marianas. SENSE colleges in the United States represent a total enrollment of 1,357,713 students.
- The survey was administered in classes randomly selected from the population of all first college-level English, first college-level math, and developmental education courses (excluding ESL courses). These are the courses most likely to enroll entering students.
- In SENSE sampling procedures, students are sampled at the classroom level. As a result, full-time students, who by definition are enrolled in more classes than part-time students, are more likely to be sampled. To adjust for this sampling bias, SENSE results are weighted based on the most recent publicly available IPEDS data.
- The special-focus module on promising practices was administered in 2011 only. Data on those items come from 2011 SENSE respondents.

With respect to race/ethnicity, 2011 CCSSE Cohort respondents, 2010 SENSE Cohort respondents, and the national community college population may be compared as follows:

Race/ethnicity	CCSSE respondents	SENSE respondents	National percentages
White	62%	54%	54%
Latino/Hispanic	12%	18%	16%
Black	11%	15%	14%
Asian or Pacific Islander	4%	3%	6%
Native American	2%	2%	1%
Other	4%	4%	10%

Sources: 2011 CCSSE Cohort data; 2010 SENSE Cohort data; IPEDS, fall 2009.

Percentages may not total 100% due to rounding.

2011 CCIS Respondents

There were, in total, 336 colleges that responded to the CCIS in its first administration. These colleges are located in 45 states, plus the District of Columbia, three Canadian provinces, and the Bahamas. The U.S. colleges come from all six accreditation regions, with a slight overrepresentation of colleges accredited by the Southern Association of Colleges and Schools and the New England Association of Schools and Colleges.

The CCIS colleges serve urban, suburban, and rural settings in the same proportions as all other community colleges nationally, though the colleges that responded tended to be large in their enrollment sizes. CCIS respondents are similar to other community colleges in terms of the proportion of colleges participating in Achieving the Dream and Completion by Design initiatives.

When looking at the enrollments in CCIS colleges by demographic characteristics (full-time versus part-time, gender, race, and age groups), the proportions of these groups in the student body were not statistically different from other colleges nationwide. There was a lower proportion of some race/ethnicity groups, and student populations at CCIS-responding colleges tended to be slightly younger than students among the remaining community colleges in the United States.

In short, this means that CCIS colleges are on average larger, slightly less diverse in limited aspects, and have a slightly younger student body than their peers nationally. These 336 colleges collectively enroll roughly 2.5 million students.



Endnotes

- 1 Weissman, J., Bulakowski, C., & Jumisko, M.K. (1997). Using research to evaluate developmental education programs and policies. In J. M. Ignash (ed.), *Implementing effective policies for remedial and developmental education: New directions for community colleges*, 100, 73–80. San Francisco: Jossey-Bass.
- 2 Boylan, H., & Saxon, D. (2002). *What works in remediation: Lessons from 30 years of research*. Prepared for the League for Innovation in the Community College. Retrieved from <http://inpathways.net/Boylan--What%20Works.pdf>
- 3 Ford, G.G., Stahl, K.J., Walker, M.E., & Ford, A.M. (June 2008). Better late than never? The relation of registration data to class performance. *College Student Journal*, 42(2), 402–407.
- 4 Freer-Weiss, D. (2004). Community college freshmen: Last in, first out? *Journal of College Student Retention Research Theory and Practice*, 6(2), 137–154.
- 5 Bettinger, E.P., & Long, B.T. (2008). *Addressing the needs of under-prepared students in higher education: Does college remediation work?* Retrieved from [http://gseacademic.harvard.edu/~longbr/Bettinger_Long_-_Addressing_needs_of_under-prepared_students_\(4-08\).pdf](http://gseacademic.harvard.edu/~longbr/Bettinger_Long_-_Addressing_needs_of_under-prepared_students_(4-08).pdf)
- 6 Scott, P.A., & Conrad, C.F. (1991). A critique of intensive courses and an agenda for research. *Higher Education: Handbook of Theory and Research*, 8, 411–159. ERIC Digest 337087
- 7 Wlodkowski, R.J. (2003, Spring). Accelerated learning in colleges and universities. *New Directions for Adult and Continuing Education*, 97, 5–15.
- 8 Brownell, J.E., & Swaner, L.E. (2010). *Five high-impact practices: Research on learning outcomes, completion, and quality*. Washington, DC: Association of American Colleges and Universities.
- 9 Moore, C., & Shulock, N. (2009). *Student progress toward degree completion: Lessons from the research literature*. Retrieved from http://www.csus.edu/help/PDFs/R_Student_Progress_Toward_Degree_Completion.pdf
- 10 Moore, C., & Shulock, N. (2009). *Student progress toward degree completion: Lessons from the research literature*. Retrieved from http://www.csus.edu/help/PDFs/R_Student_Progress_Toward_Degree_Completion.pdf
- 11 Bourdon, C., & Carducci, R. (2002). *What works in the community colleges: A synthesis of literature on best practices*. Los Angeles, CA: UCLA Graduate School of Education. (ERIC Document Reproduction Service No. ED471397).
- 12 Crede, M., Roch, S.G., & Kieszczynka, U.M. (2010, June). Class attendance in college: A meta-analytic review of the relationship of class attendance with grades and student characteristics. *Review of Educational Research*, 80(2), 272–295.
- 13 Bourdon, C., & Carducci, R. (2002). *What works in the community colleges: A synthesis of literature on best practices*. Los Angeles, CA: UCLA Graduate School of Education. (ERIC Document Reproduction Service No. ED471397).
- 14 Boylan, H., Bliss, L., & Bonham, B. (1997). Program components and their relationship to student success. *Journal of Developmental Education*, 20(3), 2–4, 6, 8.
- 15 Pascarella, E.T., & Terenzini, P.T. (2005). *How college affects students: A third decade of research (Vol.2)*. San Francisco, CA: Jossey-Bass.
- 16 CCSSE uses the Carnegie Classifications (from the Carnegie Foundation for the Advancement of Teaching) to identify colleges as urban serving, suburban serving, and rural serving.
- 17 2004 National Study of Postsecondary Faculty.

Center National Advisory Board

Peter Ewell, Chair

Vice President

National Center for Higher Education Management Systems
(NCHEMS)

Walter Bumphus

President and CEO

American Association of Community Colleges (AACC)

Bernadine Chuck Fong

Senior Partner

The Carnegie Foundation for the Advancement of Teaching

Rosemary Gillett-Karam

Director and Associate Professor

Morgan State University

Alex Johnson

President

Community College of Allegheny County (PA)

Christine Johnson

Chancellor/CEO

Community Colleges of Spokane (WA)

William Law

President

St. Petersburg College (FL)

Larry Litecky

Interim Vice Chancellor for Academic and Student Affairs

Minnesota State Colleges and Universities

Byron N. McClenney

Program Director, Achieving the Dream

The University of Texas at Austin

Alexander McCormick

Director, National Survey of Student Engagement

Indiana University

John Nixon

Associate Vice President

Accrediting Commission for Community and Junior Colleges
of the Western Association of Schools and Colleges

Daniel Phelan

President

Jackson Community College (MI)

Cam Preus

Commissioner

Department of Community Colleges and Workforce
Development (OR)

John E. Roueche

Director, Community College Leadership Program

The University of Texas at Austin

Mary Spangler

Chancellor

Houston Community College System (TX)

Gerardo de los Santos

President and CEO

League for Innovation in the Community College

Vincent Tinto

Distinguished Professor

Syracuse University

Center Staff

Kay McClenney
Director

Jeff Crumpley
Associate Director, Operations

Angela Oriano-Darnall
Associate Director, College Relations

Courtney Adkins
Survey Operations Coordinator

Arleen Arnsparger
Project Manager, Initiative on Student Success

Amina Benchouia
College Relations Specialist

E. Michael Bohlig
Senior Research Associate

Colleen Bullock
Research Associate

Karla Cantu
Research Assistant

Chris Cosart
Web Database Administrator

Meagan Cusack
College Liaison

Adrienne Dellinger
College Liaison

Zach Garcia
Administrative Associate

Janelle Guillory
Research Associate

Deryl Hatch
Research Assistant

Carlos Hernandez
Software Developer

Cat Jones
Research Assistant

April Juarez
*Program Coordinator, Student Success
BY THE NUMBERS*

JiYoon Kim
Research Assistant

Christine McLean
Senior Associate

Norvell Northcutt
Research Associate

Chris Orozco
Administrative Assistant

Shanna Pharis
Webmaster

Marlana Rodgers
Administrative Associate

Judy Row
Administrative Manager

Brandy Shaw
*Administrative Associate, Student Success
BY THE NUMBERS*

Evelyn Waiwaiole
*Project Manager, High-Impact Practices
Initiative*

John Weafer
Business Manager

CCSSE and SENSE Member Colleges

For lists of CCSSE and SENSE member colleges, visit www.cccse.org.



**Center for Community College
Student Engagement**

Community College Leadership
Program

College of Education
The University of Texas at Austin
3316 Grandview Street
Austin, TX 78705

T: 512.471.6807 F: 512.471.4209

info@cccse.org

www.cccse.org