

Overview of 2005 National Survey Results

Introduction

The Community College Survey of Student Engagement (CCSSE) provides information about effective educational practice in community colleges and assists institutions in using that information to promote improvements in student learning and persistence. CCSSE's goal is to provide member colleges with results that can be used to inform decision making and target institutional improvements. Student engagement, or the amount of time and energy that students invest in meaningful educational practices, is the underlying foundation for CCSSE's work. CCSSE's survey instrument, the Community College Student Report (CCSR), is designed to capture student engagement as a measure of institutional quality.

This overview encompasses four key sections and is organized to provide a general understanding of the findings from *CCSSE*'s 2005 survey administration. First, 2005 *CCSSE* member colleges, consortia, and student respondents are highlighted. Second, *CCSSE* institutions and their students are compared with all U.S. public community colleges. In the third section, selected findings are showcased. In the fourth section, information is provided to help college leaders understand and use their *CCSSE* results.

CCSSE Member Colleges

CCSSE conducted its pilot survey in 2001, a field test in 2002, and national administrations in the spring of 2003, 2004, and 2005. A total of 257 institutions across 38 states participated in the 2005 administration. One hundred fifty of these member colleges are classified as small (< 4,500), 61 as medium (4,500-7,999), 28 as large (8,000-14,999), and 18 as extra-large institutions (15,000 + credit students)¹. Seventy-two of the 2005 member colleges are located in urban areas, 59 in suburban areas, and 126 in rural areas.

CCSSE Consortia

A *CCSSE* consortium may comprise two or more colleges in a multi-college district, system, or state — or alternatively, a group of five or more colleges with common interests or challenges. Consortium members share reports and can add additional questions to the survey.

2005 CCSSE membership includes statewide participation in Indiana, Louisiana, North Dakota, Virginia, and West Virginia. Other state-based consortia include groups of colleges in Georgia, Illinois, Minnesota, North Carolina, and Northeast Minnesota. Georgia, Illinois, Louisiana, Minnesota, North Carolina, and Virginia consortia chose to add questions to the CCSR for purposes of statewide assessment, to respond to accrediting agencies, and/or for internal review.

The *CCSSE* consortium for Achieving the Dream comprises 14 colleges from four states that are part of a national initiative focused on improving success rates for community college students — particularly low-income students and students of color.

This is the second year for the Hispanic-Serving Institutions/Hispanic Association of Colleges and Universities (HSI/HACU) Consortium. consortium consists of 16 colleges in five states. Qualifying institutions include those that have HSI designation and/or hold membership in HACU. The HSI/HACU Consortium joins together to build collaborative and networking relationships and will highlight promising practices through publications and at national and regional community college conferences. The consortium collaborated to add questions to the Community College Student Report and will use CCSSE data and comparative reports to make informed decisions about how to improve these unique institutions.

Also in its second year is the Texas Small Colleges Consortium. These colleges are working to strengthen educational practice through datadriven decision making and strategically targeted performance improvement initiatives. Nine small Texas community colleges joined CCSSE this year to gain valuable information on the engagement, learning, and retention of the students they serve - and to build institutional capacity for collecting, understanding, and using data about educational practices and student success. With support from the Houston Endowment, institutions will gather and review baseline data in 2005, implement necessary change for improvement in 2006, and administer a follow-up survey for additional review in 2007.

Student Respondents

Credit classes were randomly selected – stratified by time of day (morning, afternoon, and evening) – from institutional class data files to participate in the survey. Of those sampled, 133,281 students submitted usable surveys. The number of completed surveys produced an overall "percent of target" rate of 80%. Percent of target rate is the ratio of the adjusted number of completed surveys to target sample sizes. (The adjusted survey count is the number of usable surveys that were filled out properly and did not fall into any of the exclusionary categories.²)

2005 Student Respondent Profile

To compare the characteristics of student respondents with the characteristics of the underlying student population for each participating college, *CCSSE* uses the data reported by the institution in its 2003 IPEDS Enrollment Report for the following variables: gender, race and ethnicity, student age, and enrollment status (part- or full-time). The data are aggregated to compare the 2005 *CCSSE* survey respondent population to the total student population of 2005 *CCSSE* member colleges.

Gender

Of the 129,474 student respondents who answered this item, 39% are male and 61% are female. This mirrors the full population of *CCSSE* community college students, comprised of 41% males and 59% females.

Age

2005 CCSSE student respondents range in age from 18 to 65+ years old. Approximately 89% are between 18 to 39 years old; 63% are 18 to 24 years old, while 26% are 25 to 39 years old.

Racial Identification

Sixty-eight percent of student respondents identify themselves as White/non-Hispanic, 8% as Hispanic/Latino/Spanish, 12% as Black or African American, and 2% as Asian. Two percent of the student respondents are Native American. Three percent marked "other" when responding to the question, "What is your racial identification?"

International Students

Responses to the question, "Are you an international student or foreign national?" reflect variations related to college size. Three percent of small college respondents indicate that they are international students, while 4% of medium size college respondents indicate the same. In large institutions, approximately 8% of the students who completed the survey indicate international/foreign student status. Extra-large institutions have the highest representation of international students at 9%.

Enrollment Status

Sixty-nine percent of the student respondents report attending college full-time, while 40% of the CCSSE 2005 colleges' total student population attended full-time. Only 31% of the surveyed students report being part-time college students,

compared to 60% as reported to IPEDS. This inverse representation is a result of the sampling technique and the in-class administration process. For this reason, survey results are either weighted or disaggregated on the full-time/part-time variable so that reports will accurately reflect the underlying student population.

The following student respondent categories are weighted according to Fall 2003 IPEDS population data.

Limited English Speaking Students

Students with limited English speaking skills, or those whose native language is not English, comprise a significant proportion of students in community colleges. Among *CCSSE* participants, small institutions include 4% of non-native English speakers, while medium institutions enroll 7% of non-native English speakers. Comparatively, large numbers of non-native English speaking students attend large (14%) and extra-large (17%) institutions.

First-Generation Status

Over a third (37%) of students indicate that neither parent has earned a degree higher than a high school diploma which *CCSSE* classifies as "first-generation." Of these first-generation students, 36% percent indicate that their mothers' highest level of education is a high school diploma, and 35% indicate that level for their fathers.

Educational Attainment

Sixty-eight percent of the respondents report starting their college careers at the community college where they completed the survey. Meanwhile, 74% of students indicate that their highest level of educational attainment is a high school diploma or GED; 17% report either a certificate or an associate degree; 5% have earned a bachelor's degree; and 1% have earned an advanced degree.

Credit Hours Earned

Forty-eight percent of students report completing fewer than 15 credit hours; 21% have completed 15-29 credit hours; and 32% have completed more than 30 credit hours.

<u>Grades</u>

Forty-five percent of students report that they earned grades of B+ or higher, while 2% of

students report that they earned grades of C- or lower.

External Commitments

Fifty-seven percent of students work 21 or more hours per week; 21% of students care for dependents between 1 and 10 hours per week; and 68% of students spend between 1 and 5 hours per week commuting to and from class.

Excluded Respondents

The total counts of respondents in an institution's raw data file will differ from the numbers reported in the institutional reports due to intentional exclusion of certain surveys. Exclusion in accord with consistent decision rules serves the purpose of ensuring that all institutional reports are based on the same sampling methods and that results therefore are comparable across institutions. Respondents may be excluded from institutional reports for the following reasons:

- The respondent did not indicate whether he or she was enrolled part- or full-time at the institution. Because all results are either weighted or broken down by enrollment status, this is essential information for reporting.
- The survey is invalid³.
- ★ The student reported his or her age as under 18.
- The student indicated that he or she had taken the survey in a previous class.
- Oversampled respondents are not included. These are surveys that individual institutions paid an additional fee to acquire. Because there are no requirements stipulating how these students are sampled, these data are not included in the standard institutional report.

Respondents Included in the College's Raw Data File

Raw data files contain responses from all students who completed the CCSR, including oversample and/or on-line respondents, with the exception of invalid surveys and those completed by students under the age of 18.

Representation

CCSSE Institutions Compared to All U.S. Public Community Colleges

Overall, CCSSEs 2002, 2003, 2004, and 2005 college membership represents a total of 404^4 (unduplicated) colleges across 43 states. Of the 404 member colleges, 225 are classified⁵ as small (< 4,500); 95 as medium (4,500-7,999); 52 as large (8,000-14,999); and 32 as extra-large (15,000+). In terms of urbanicity: 112 member colleges are urban, 104 as suburban, and 188 as rural.

2005 CCSSE membership includes 256⁷ colleges across 38 states. The table below provides information about the representation of 2005 CCSSE member colleges as compared to community and technical colleges across the nation. CCSSE uses 2003 IPEDS enrollment data for comparisons in this table.

Specifically, the numbers and accompanying percentages in parentheses displayed in the first two columns, "2005 CCSSE Member Colleges" and "National Population." represent withincategory data. In other words, there are 28 large CCSSE member colleges representing 11% of the 256 total 2005 CCSSE colleges, while there are 152 large colleges in the national population, representing 14% of the overall total of 1,095. Meanwhile, the percentages displayed in the last column represent the proportion of 2005 CCSSE colleges found in the national population overall as well as by size and urbanicity. For instance, there are 71 urban 2005 CCSSE member colleges, constituting 17% of the 422 urban colleges nationwide. The percentages in red font show that colleges by size generally mirror the national population (58% and 58% for small, 24% and 20% for medium, 11% and 14% for large, and 7% and 8% for extra-large).

Colleges by Size and Urbanicity

	2005 CCSSE Member Colleges	National Population ⁸	2005 CCSSE Proportion of National Population
By Size			
# of Institutions	256 (<mark>100%</mark>)	1,095 (100%)	23%
Small (up to 4,499)	149 (<mark>58%</mark>)	630 (<mark>58%</mark>)	24%
Medium (4,500-7,999)	61 (<mark>24%</mark>)	224 (<mark>20%</mark>)	27%
Large (8,000-14,999)	28 (<mark>11%</mark>)	152 (<mark>14%</mark>)	18%
Extra-Large (15,000+)	18 (<mark>7%</mark>)	89 (<mark>8%</mark>)	20%
By Urbanicity			
# of Institutions	256 (<mark>100%</mark>)	1,083 (100%)	24%
Urban	71 (<mark>28%</mark>)	422 (<mark>39%</mark>)	17%
Suburban	59 (<mark>23%</mark>)	255 (<mark>24%</mark>)	23%
Rural	126 (49%)	406 (37%)	31%

CCSSE Student Respondents across Member Institutions

In addition, it is valuable to examine the percentages of students represented across participating CCSSE institutions.

Overall, *CCSSE*'s survey respondents in 2002, 2003, 2004, and 2005 represent a total credit enrollment of 2,360,316 students across 404 *CCSSE* member colleges. *CCSSE*'s entire college membership represents approximately 36% of the nation's community colleges (1,113 accredited, public associate degree-granting institutions) and 37% of their 6,318,779 credit students.

2005 CCSSE member colleges enroll a total of 1,308,928 credit students, or about 21% of the total credit-student population in the nation's community colleges. The table below shows a comparison of the adjusted number of CCSSE survey respondents displayed alongside the total student enrollment at participating colleges. The column labeled "2005 CCSSE Member Colleges

Adjusted Respondents" shows the number of usable surveys (those not affected by *CCSSE*'s exclusionary rules). The column labeled, "2005 *CCSSE* Member Colleges Enrollments" reflects institutions' populations as reported to IPEDS for Fall 2003 enrollment reports.

These data are displayed by institutional size (small, medium, large, and extra-large) as well as urbanicity (rural, suburban, and urban).

The table on the next page highlights a slight over-representation of small institutions which in turn results in an under-representation of extra-large colleges. (Please see the section on Weighted Results for more information.) The representation of students is highlighted in red font, showing within-category comparisons by size and urbanicity. Table 3, provided in the Appendix, displays additional comparisons between 2005 *CCSSE* student respondents and their respective *CCSSE* member colleges by race/ethnicity, gender, and age.

Adjusted Respondents by Size and Urbanicity

	2005 <i>CCSSE</i> Member Colleges Adjusted Respondents ⁹	2005 <i>CCSSE</i> Member Colleges Enrollments
	Respondents	Credit Enrollments
	133,281 students (100%)	1,308,928 students (100%)
By Size		
Small (up to 4,499)	49,695 (<mark>37%</mark>)	275,825 (<mark>21%)</mark>
Medium (4,500-7,999)	38,970 (<mark>29%</mark>)	333,709 (<mark>25%</mark>)
Large (8,000 - 14,999)	24,721 (<mark>19%</mark>)	290,731 (<mark>22%</mark>)
Extra-Large (15,000+)	19,895 (<mark>15%</mark>)	408,663 (<mark>31%</mark>)
By Urbanicity		
Urban	47,214 (35%)	574,499 (<mark>44%</mark>)
Suburban	38,991 (29%)	445,824 (<mark>34%</mark>)
Rural	47,076 (35%)	288,605 (<mark>22%</mark>)

CCSSE Member College Enrollments Compared to All U.S. Public Community Colleges

Finally, CCSSE's 2005 member college enrollment figures represent 21% of the national student population in community colleges. The table below shows the number of students from CCSSE member colleges as compared to the number of students across the nation by size and urbanicity.

Specifically, the numbers and accompanying percentages in parentheses displayed in the first two columns, "Students Enrolled in 2005 *CCSSE* Member Colleges" and "National Student Population in Community Colleges," represent within-group data. In other words, 275,825 students enrolled in small *CCSSE* member colleges represent 21% of the 1,308,928 total

students enrolled in those colleges, while 1,340,789 students enrolled in small colleges nationwide represent 21% of the nationwide enrollment of 6,318,779. Meanwhile, the percentages displayed in the last column represent the proportion of students enrolled in *CCSSE* member colleges found in the national population by size and urbanicity. For instance, there are 288,605 students enrolled in rural *CCSSE* member colleges, which represents 31% of the 926,950 students enrolled in rural colleges nationwide.

In general, students enrolled in *CCSSE* member colleges represent students in public community colleges nationwide by size (small, both at 21%, medium at 26% and 21%, large at 22% and 26%, and extra-large at 31% and 32%,) and urbanicity (urban at 44% and 52%, suburban at 34% and 33%, and rural at 22% and 15%).

Enrollments by Size and Urbanicity

	Students Enrolled in 2005 CCSSE Member Colleges	National Student Population in Community Colleges	Proportion of Students Enrolled in 2005 CCSSE Member Colleges
	Total Credit Enrollment	Credit Enrollment	
	1,308,928 <i>CCSSE</i> students (100%)	6,318,779 national population (100%)	21%
By Size			
Small (up to 4,499)	275,825 (<mark>21%</mark>)	1,340,789 (<mark>21%</mark>)	21%
Medium (4,500-7,999)	333,709 (<mark>25%</mark>)	1,314,678 (<mark>21%</mark>)	25%
Large (8,000-14,999)	290,731 (<mark>22%</mark>)	1,668,416 (<mark>26%</mark>)	17%
Extra-Large (15,000+)	408,663 (<mark>31%</mark>)	1,994,896 (<mark>32%</mark>)	20%
By Urbanicity			
Urban	574,499 (<mark>44%</mark>)	3,238,348 (<mark>52%</mark>)	18%
Suburban	445,824 (<mark>34%</mark>)	2,089,879 (<mark>33%</mark>)	21%
Rural	288,605 (<mark>22%</mark>)	926,950 (<mark>15%</mark>)	31%

Selected Findings

Many crucial questions that community colleges need answered — What are our students' goals? What issues keep our students from persisting? How effectively are we engaging students in the classroom? How satisfied are our students with the support services we offer? — can be answered by investigating the percentage of student responses to specific CCSSE survey items.

This section on Selected Findings from the 2005 CCSR is organized in terms of five key topics: Academic Experience, Educational Goals, Barriers to Persistence, Student Satisfaction, and Student and Academic Support Services.

Academic Experience

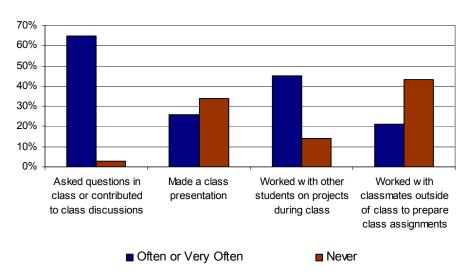
A positive academic experience is a product of many ingredients, one of which is the amount of

time and energy that students invest in their academic work. The CCSR asks students to respond to seven survey items in order to gauge how actively they are involved in their education. Students are given the opportunity to mark *Very Often, Often, Sometimes*, or *Never* in response to items such as the following:

- * Asked questions in class or contributed to class discussions
- ★ Made a class presentation
- Worked with other students on projects during class
- ★ Worked with classmates outside of class to prepare assignments

While some students are highly involved in their academic experience (those who marked *Often* or *Very Often*), others are less engaged, as illustrated by their responses of *Never*, as displayed in the figure below.

Academic Experience

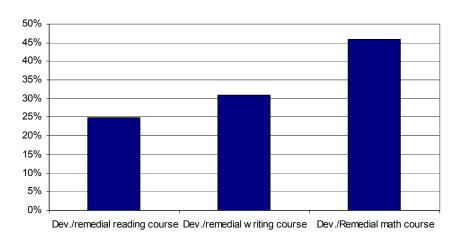


Developmental Education

Community colleges have quite diverse student populations, and in order to adequately serve student needs, the institutions offer a variety of courses and special programs. Item 8 on the

CCSR asks students to identify which course paths they are following. As shown in the figure below, large percentages of students either have taken or plan to enroll in developmental reading, writing, and/or math courses.

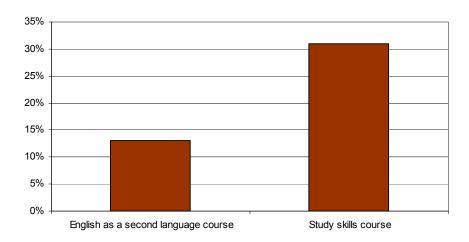
Developmental Education (Have Done or Plan to Do)



ESL and Study Skills

Thirteen percent of students have taken or will enroll in an ESL course, and nearly a third have taken or will enroll in a study skills course.

ESL and Study Skills (Have Done or Plan to Do)



Curricular Experiences

The table below shows the percentage of students who have taken or plan to enroll in

internships, honors courses, college orientation courses, and organized learning communities.

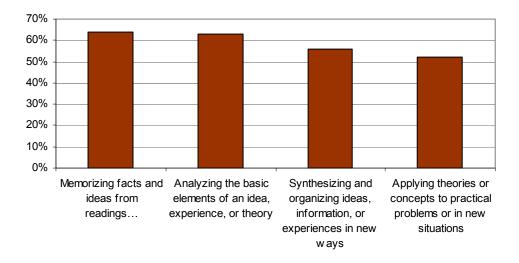
Curricular Experiences	Have done or Plan to do
Internship, field experience, co-op experience, or clinical assignment	57%
Honors course	25%
College orientation program or course	40%
Organized learning communities (linked courses/study groups led by faculty or counselors)	25%

Student Learning

Student respondents indicate how much their coursework emphasizes intellectual processes such as memorization, the application of theories and concepts to practical problems, analysis, synthesis and organization, making

value judgments, and using learned information to perform new skills. The figure below illustrates students' perceptions of the extent to which their respective colleges promote these cognitive activities.

Student Learning (Quite a bit or Very Much)



Educational Goals

Community colleges have multiple missions and goals, as do their students. Students responding to the survey are given the opportunity to mark *Primary Goal*, Secondary Goal, or Not a Goal in response to a list of possible goals for attending their particular college. As a result, many students mark more than one primary goal; therefore, the percentages in the table below do not sum to 100%.

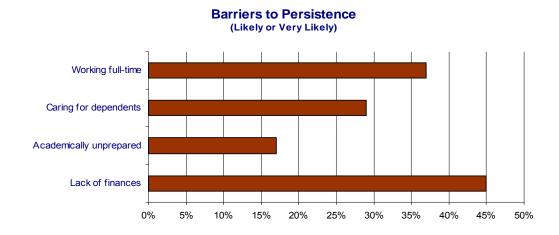
As seen in the table below, students identify various educational goals. Nearly 57% of the student respondents identify obtaining an associate degree as a primary goal. Forty-eight percent are interested in transferring to a 4-year college or university, while 41% are primarily interested in obtaining or updating job-related skills. Thirty percent of respondents seek to change careers, and 29% aspire to complete a certification program.

Educational Goals	Primary goal	Secondary goal	Not a goal
Complete a certification program	29%	19%	52%
Obtain an associate degree	57%	21%	23%
Transfer to a 4-year college or university	48%	21%	31%
Obtain or update job-related skills	41%	26%	33%
Self-improvement/personal enjoyment	40%	34%	26%
Change careers	30%	16%	54%

Barriers to Persistence

CCSSE also asks students to indicate the issues that would require them to withdraw from college. That is, what keeps students from achieving their educational goals? The percent of students who report that the various factors would result in their withdrawing from class or from college is highlighted in the graph below. Again, students could mark more than one factor; therefore, percentages will not sum to 100%.

Other barriers to persistence include lack of peer or family support. Twenty-two percent of students report that their friends are *Somewhat* or *Not Very* supportive of "your attending this college" while only 13% respond similarly about support from their immediate families.



Student Satisfaction

A useful measure of satisfaction is whether a student recommends a service or institution to others. The CCSR asks students if they would recommend their college to a friend or family member. Ninety-four percent report they would make such a recommendation. Another item asks students to evaluate their entire educational experience. Eighty-six percent describe their experience as *Good* or *Excellent*, and only 1% rate their experience as *Poor*.

Another measure of student satisfaction is the percent of returning or successful students. Sixty-six percent of the students indicate that they plan to enroll in their college within the next 12 months, while 12% report that they have accomplished their goals and will not be returning. Twenty-three percent report they are uncertain or have no plans to return.

Student and Academic Support Services

Often surveys ask a combination of questions relating to satisfaction, use, or importance levels of services, but rarely are surveys designed in a way that asks students to link all three, as does *CCSSE*. The table below displays use,

satisfaction, and importance of a number of key academic and student support services. The first column reports the percentage of students who say that they used the service either *Sometimes* or *Often*; the second column shows the percentage of students who report they are *Somewhat* or *Very Satisfied* with the service; and the third column reports the percentage of students who rate the service as *Somewhat* or *Very Important*.

The services highlighted in bright blue in each column are the three highest ratings in that area, and the services highlighted in rust are among the lowest rated in each area.

Accordingly, students are most likely to use, express satisfaction with, and rate as important the following services: academic advising and planning and computer labs, followed by financial aid advising. While almost half of the students report child care as important, only 5% use child care services and only 11% are satisfied with this service. Similarly, 65% of respondents rate job placement assistance as important, but only 12% use this service and only 23% are satisfied with it.

Student Services by Use, Satisfaction, and Importance

Student Services	Use	Satisfaction	Importance	
Academic Advising /planning	55%	70%	89%	
Career Counseling	28%	45%	78%	
Job placement assistance	12%	23%	65%	
Peer or other tutoring	23%	38%	69%	
Skills labs (writing, math, etc.)	38%	50%	74%	
Child care	5%	11%	45%	
Financial aid advising	45%	52%	78%	
Computer lab	62%	71%	84%	
Student Organizations	15%	27%	58%	
Transfer credit assistance	27%	37%	71%	
Services to students with disabilities	8%	18%	59%	

Participation in Selected Activities

The first 21 engagement items on the CCSR ask students to indicate how often they have engaged in particular activities during the current academic year. For purposes of analysis, CCSSE collapsed the response categories Often and Very Often to

report substantial levels of engagement; the criterion for inclusion was that 50% of the students had to report participating in the activity. This information is highlighted in the table on the next page.

<u>Percentage of Students Who Reported Participating Often or Very Often in</u> Selected Activities by Enrollment Status

Most Frequent Student Activity Items	All	Less Than Full-time	Full-time
Asked questions in class or contributed to class discussions	65%	63%	67%
Prepared two or more drafts of a paper or assignment before turning it in	49%	45%	56%
Worked on a paper or project that required integrating ideas or information from various sources	57%	51%	67%
Used the Internet or instant messaging to work on an assignment	58%	52%	67%
Received prompt feedback (written or oral) from instructors on your performance	55%	55%	56%
Discussed ideas from your readings or classes with others outside of class (students, family members, coworkers, etc.)	49%	47%	52%

Across the board, part-time students are less likely than are their full-time peers to indicate substantial levels of engagement.

In comparison, it is also important to note what students are *not doing* in college as frequently as one might expect. To report the least frequent

activities, *CCSSE* uses the *never* response category. The table below consists of items where 30% or more of the students report *never* engaging in that particular activity. Part-time students are more likely than are their full-time peers to report "never" with regard to significant levels of engagement.

<u>Percentage of Students Who Reported Never Participating in Selected Activities by Enrollment Status</u>

Least Frequent Student Activity Items	All	Less Than Full-time	Full- time
Participated in a community-based project as a part of a regular course	81%	85%	75%
Tutored or taught other students (paid or voluntary)	74%	78%	68%
Worked with instructors on activities other than coursework	73%	78%	66%
Discussed ideas from your readings or classes with instructors outside of class	48%	54%	41%
Worked with classmates outside of class to prepare class assignments	43%	51%	33%

CCSSE in Action: Understanding Survey Results

CCSSE recommends that college leaders familiarize themselves with CCSSE findings before communicating about the results. The following are some things to consider:

CCSSE Benchmarks 10

Benchmarks are groups of conceptually related items that address key areas of student engagement, learning, and persistence. CCSSE's five benchmarks denote areas that educational research has shown to be important in quality educational practice. The five benchmarks of effective educational practice in community colleges are active and collaborative learning. student effort, academic challenge, studentfaculty interaction, and support for learners. These benchmarks are tools that can be used to performance compare college across benchmarks, to similarly sized institutions, and to the full CCSSE population of community colleges.

Enrollment Status

Enrollment status (part-time versus full-time) receives special attention in CCSSE reports; all results are either presented separately for parttime and full-time students or are weighted by enrollment status. In the CCSSE sampling procedure, classes are selected, not students. Accordingly, full-time students, who by definition are enrolled in more classes than part-time students, are more likely to be sampled. As a result, though approximately two-thirds of the students enrolled at the participating institutions are part-time students, the proportion in the CCSSE sample is nearly opposite. In the data analysis process, therefore, CCSSE assigns weights to responses based on respondents' enrollment status, thereby producing more accurate measures of student engagement.

Weighting is a technique that proportionally adjusts an individual respondent's contribution to a statistic, such as a mean or frequency; thus, some responses are weighted more heavily than others. If subgroups (e.g., part- versus full-time students) differ in their responses, then aggregate results will be biased in favor of the larger subgroup. Bias occurs, for example, when a disproportionate number of full-time students complete the survey as compared to the population.

With the assignment of weights, subgroups (parttime) that are disproportionately small in the sample relative to the population have larger weights that increase their impact on summary statistics; the converse is true for subgroups (fulltime) that are disproportionately large in the sample relative to the population.

There are several other individual characteristics, such as race, sex, or credit hours completed, where there could potentially be differences in subgroups. This observation begs the question: Why does CCSSE weight data on enrollment status and not on other individual characteristics? The answer is simple: there is no reason to do it. The only systematic bias that occurs is with enrollment status.

Census Approach

CCSSE was aware that normal sampling procedures would not be appropriate for certain campuses participating in the 2005 administration due to very small student populations. Therefore, instead of sampling at the course level, CCSSE attempted to survey all students on campuses where total student enrollment was less than 370. In those cases, CCSSE sent surveys and supplies equal to the campus' total IPEDS enrollment and requested that all students have ample opportunity to complete the survey under supervision.

Effect Size as a Measure of Notable Differences

Effect size is a measure of group differences. In the *CCSSE* results, it refers to mean differences between your institution and the group of colleges to which your institution is being compared divided by their standard deviation. This procedure rescales all effect sizes to the same scale (differences in standard deviations) and thus allows for comparisons.

CCSSE uses both statistical significance and standardized effect sizes to identify items on which a college's performance differs from comparison groups. An asterisk (*) highlights items for which students' responses differ at a statistically significant level (p < .001) and have standardized effect sizes equal to or greater than (.2). Statistical significance is based on the effect size, the number of respondents, and the variability in their responses; as a single number, it also is the probability that the observed difference between outcomes would occur where there is

truly no difference. While this is a useful guideline for identifying differences between groups, very small differences can be statistically significant in very large sample sizes such as the *CCSSE* national data set. Thus, items where notable differences occurred were identified as standardized effect sizes of (.2) or greater.

<u>Statistical Significance Meets Practical</u> Significance

In addition to focusing on items meeting the criteria highlighted above, look for patterns in students' responses. For example, are students consistently above or below the mean of the comparison group in certain areas engagement? Are the differences explainable in terms of a college's mission, the nature of the undergraduate program, or certain students' characteristics? Also, do not rely exclusively on statistical significance tests to identify areas that warrant attention. A consistent pattern of scoring above the mean, even though all the items may not reach statistical significance, may indicate the institution is doing the right things in terms of good educational practice. At the same time, some institutions have very high expectations for student engagement and may fall short of their own

aspirations even though comparisons with other institutions are favorable. And in some cases, of course, it may be that the national mean is itself unacceptably low.

CCSSE Consortia Results

CCSSE consortium colleges¹¹ that added questions to the survey instrument will find their corresponding frequency results behind the Frequency Distributions tab. In addition to a college's comparison to its consortium group and the 2005 CCSSE population, a consortium college also will receive a comparison to other colleges in its size category, provided on the institutional report CD.

Oversampling

CCSSE's sample sizes are determined by institutional size, as reported in IPEDS. Colleges may elect to oversample in order to examine results for specific groups (such as students enrolled in developmental courses or students attending particular campus sites) or in order to increase overall sample size. The oversample dataset is included on the college's institutional report CD.

End Notes

¹These enrollment statistics are based on Fall 2003 IPEDS data with the exception of situations in which it is necessary for colleges to self-report.

² See exclusionary rules on pg. 3.

³ If a student does not answer any of the 21 sub-items on item 4, answers "Very Often" to all 21 items, or answers "Never" to all, the survey is excluded.

⁴ Includes U.S. public, associate-degree granting institutions; does not include hospital-based institutions.

⁵ Institutional size is based on Fall 2003 IPEDS enrollment figures and is defined as small, medium, large, and extra-large.

⁶ CCSSE member colleges self-classify in terms of rural, suburban, and urban locations, while colleges in the national population are classified using IPEDS data.

⁷ Hospital-based institutions are not included in "representation" charts.

⁸ Includes all colleges in the target population that have valid IPEDS enrollment data.

⁹ Minus exclusions (see exclusionary rules on pg. 3).

¹⁰ Please see the Benchmark Overview for specific information regarding calculations of benchmark scores.

¹¹ See pp. 1-2 for information about CCSSE consortia.