Understanding Survey Results

CCSSE Cohort
Benchmarks
Frequencies and Means
Standards for Interpreting Mean Differences
Weights and Local Student Characteristics
Comparison Group Definitions
Student Level Breakout Definitions
Student Identifier Data

Before communicating results to the campus community, college leaders should familiarize themselves with their CCSSE findings as well as consider the following:

CCSSE Cohort
CCSSE uses a three-year cohort of participating colleges in all of its data analyses, including the computation of benchmark scores. For returning participants, the college’s most recent year of participation is included in data analyses. This cohort is referred to as the 2010 CCSSE Cohort (2008 through 2010) throughout all reports and documentation. This approach increases the total number of institutions and students contributing to the national data set, which in turn increases the reliability of the overall results. In addition, the three-year cohort approach minimizes the impact, in any given year, of participation by statewide consortia.

Back to top

Benchmarks
To assist colleges in their efforts to reach for excellence, CCSSE reports national benchmarks of effective educational practice in community colleges. Research shows that the more actively engaged students are—with college faculty and staff, with other students, and with the subject matter—the more likely they are to learn and to achieve their academic goals. CCSSE benchmarks focus on institutional practices and student behaviors that promote student engagement—and that are positively related to student learning and persistence.

The five benchmarks of effective educational practice in community colleges are active and collaborative learning, student effort, academic challenge, student-faculty interaction, and support for learners.

How Benchmarks are Calculated

Back to top

Frequencies and Means
Responses to individual CCSSE survey items are available in two different formats: frequencies and means.

Frequency reports show the number and percentage of respondents for each survey item response option. For example, of 1,000 students responding to a given survey item, 324 students (32.4%) responded strongly agree; 263 students (26.3%) responded agree; 175 students (17.5%) responded neutral; 124 students (12.4%) responded disagree; and 114 students (11.4%) responded strongly disagree.

Means reports present an average of all responses for a particular type of survey item. These analyses compare average item responses for survey items that have scaled responses (e.g., strongly agree to strongly disagree) between member colleges and various groups (e.g., similarly sized colleges), or between subgroups within a college. Means reports also provide a t-test statistic, effect size, and a visual indicator of whether these two means are practically different.

Back to top

Standards for Interpreting Mean Differences
Statsicians conducting purely scientific research look primarily to measures of statistical significance to determine whether there are differences between two sets of measures (i.e., statistically significant at an alpha level of .05). However, in applied work, statistical significance by itself may not be meaningful. In a very large sample of respondents, with one subgroup scoring 3.337 on a scale of 1 to 5 and another subgroup scoring 3.40 on the same item, the difference may be statistically significant, yet may not be enough to warrant dedicating discussion and resources to address identified differences.

In applied research, a second measure of the strength of the result is the effect size. This measure addresses the strength of the relationship as compared to the significance test, which is testing whether the relationship...
occurred by chance.
When interpreting means results in CCSSE and Survey of Entering Student Engagement (SENSE) data, the Center for Community College Student Engagement (CCCSE) uses a combination of two measures: a very conservative alpha level of .001 and an effect size of .20. Therefore, if a comparison is significant at the alpha level of .001 and has an effect size of .20 or greater, then it is considered a difference to be worthy of further investigation.

Weights and Local Student Characteristics
In CCSSE 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, a statistical weighting procedure—based on the most recent publicly available IPEDS data—is applied to CCSSE results. This procedure accounts for the sampling bias when student groups contain both full- and part-time students. As an additional option, colleges can choose to produce reports via the CCSSE online reporting system with the statistical weighting procedure disabled if they feel it is appropriate.

It should be noted that even the most recent IPEDS data are approximately three years old and may not always accurately represent a college’s current student population. For example, in the case that a college has experienced a significant change in enrollment characteristics during the three years prior to administering CCSSE, the college’s institutional research department may want to consider whether the weights based on the IPEDS numbers are completely appropriate.

Another example of when to consider not weighting CCSSE data is in the case of a college where the vast majority of its students are either full-time or part-time (e.g., 92% full-time). That college may want to look at the unweighted results for the majority group of students to guide campus discussions.

CCSSE encourages member colleges to carefully compare the student characteristics of their CCSSE sample with the characteristics of the student population from which the sample was drawn in order to evaluate the effect of a possible sampling bias.

Comparison Group Definitions
Size
CCSSE Cohort colleges fall into one of four size groups based on student enrollment as reported to IPEDS. The four size groups are:
- Small (<4,500)
- Medium (4,500-7,999)
- Large (8,000-14,999)
- Extra-Large (>15,000)

Location
CCSSE Cohort colleges are placed into one of three location groups, based on designations from the Carnegie Foundation Classification of Institutions of Higher Education.
The three location groups are:
- Rural-serving
- Suburban-serving
- Urban-serving

Accreditation Region
Most CCSSE Cohort colleges are accredited by regional higher education accrediting bodies. The six regional accrediting bodies are:
- Higher Learning Commission of the North Central Association of Colleges and Schools
- Middle States Commission on Higher Education
- New England Association of Schools and Colleges
- Northwest Commission on Colleges and Universities
- Southern Association of Colleges and Schools
- Western Association of Schools and Colleges

Consortium
A consortium is a group of colleges with common interests, characteristics, or locations that wish to join in a CCSSE administration for the purpose of sharing data.

Student Level Breakout Definitions
Part-Time vs Full-Time (Enrollment Status)
This breakout is based on responses to Item 2 ("Thinking about this current academic term, how would you characterize your enrollment at this college?").

Placed into Developmental vs Not Developmental Coursework
This breakout is based on responses to the first three subitems in Item 17 (“Which of the following have you done, are you doing, or do you plan to do while attending this college?”):

  8c. Developmental remedial/reading course
  8d. Developmental remedial/writing course
  8e. Developmental remedial/math course

If a student responded that he or she was enrolled in or planned to take any one or more of these three types of courses during his or her first semester or quarter at the college, he or she is classified as Developmental; otherwise, he or she is classified as Non-Developmental.

Traditional vs Nontraditional-Age
This breakout is based on responses to Item 29 (“Mark your age group.”). Respondents under the age of 18 are excluded from all data sets. Respondents marking age groups 18 to 19, 20 to 21, and 22 to 24 are classified as Traditional-Age and those marking age groups 25 to 29, 30 to 39, 40 to 49, 50 to 64, or 65+ are classified as Nontraditional-Age.

First-Generation vs Not First-Generation
This breakout is based on responses to Item 36 (“What is the highest level of education obtained by your: Father/Mother?”). If the respondent indicated that his or her mother or father had attended at least some college even if the parents did not complete a degree, then the student is classified as Not First-Generation; otherwise, he or she is classified as First-Generation. In addition, to be classified as First-Generation or Not First-Generation, the student must have responded to both the mother and father education level items.

Race/Ethnicity
This breakout variable is based on responses to Item 34 (“What is your racial identification?”).

Male vs Female Students (Gender)
This breakout is based on responses to Item 30 (“Your sex:”)

Student Identifier Data
In accordance with Texas state law and The University of Texas at Austin’s policies, CCCSE does not provide student-identifier data in the institution’s raw data file available for download via the CCSSE online reporting system. For those colleges that depend upon student identifiers for institutional analyses, we will be happy to release that information in a separate and secure transmission. If you would like these data, please contact your liaison, and CCCSE will provide you the raw data file with student identifiers on an encrypted CD-ROM. The decryption password will be provided via e-mail.