



Talking SENSE

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SENSE Website Expands to Include More Data Reporting Capabilities

This is an exciting time for the Center for Community College Student Engagement (CCCSE) and its member colleges. Center researchers have been working diligently this fall to develop new online data reporting and analyses capabilities and are now pleased to have launched the expanded reporting website for the Survey of Entering Student Engagement (SENSE).

New Means Comparisons Give Deeper Insight

In addition to the existing frequency reports feature, SENSE member colleges can now generate reports comparing average item responses (means) between their colleges and various groups, including but not limited to similarly-sized colleges, other colleges within their respective states, and custom-selected comparison groups. As with other custom comparison reports, these analyses must include a minimum of three other colleges.

Frequency tables provide a wealth of information about SENSE respondents—such as how many entering students *very often*, *often*, or *never* engage in educationally meaningful activities (e.g., discussing grades and assignments with an instructor). However, disaggregation of data by comparing the mean response between two subgroups (e.g., male vs. female or developmental vs. non-developmental students) can reveal significant differences between groups, leading to inquiry and discussion on the part of the college. Like the means reports for the Community College Survey of Student Engagement (CCSSE), the new SENSE means reports also provide the number of respondents (frequencies) for each subgroup along with a t-test statistic, effect size, and a visual indicator of whether these two means are meaningfully different. (See sidebar on Center standards for determining significance.)

Center standards for interpreting SENSE or CCSSE mean differences

Statisticians 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 issues.

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 SENSE and CCSSE data, the Center uses a combination of these 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.

Weighting SENSE results is now optional

Means results are not the only new aspect of the enhanced SENSE reporting website. Users have the option of turning off the automatic weighting now used to calculate SENSE frequency and means results.

Combat Entering Student Attrition JOIN *SENSE* 2010

Nationally, nearly half of community college entering students drop out before their second year. *SENSE* provides a systematic approach to understanding entering students' earliest experiences, painting a clear picture of student behaviors in the earliest weeks of college and the institutional practices that affect students during this critical time.

ONLINE REGISTRATION FOR
SENSE 2010 IS OPEN UNTIL
APRIL 3, 2010

www.enteringstudent.org

Special discount available on *SENSE* 2010
for colleges new to Center membership.
Call 512-232-8247 for details.

In both *SENSE* and *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, *CCSSE* results are weighted using IPEDS data. However, Center researchers were not sure if weighting was necessary for *SENSE* respondents. During summer 2009 (following the completion of the fall 2008 field test), the Center undertook a comprehensive study to determine whether to implement a weighting schema for *SENSE*.

In the recently completed study, researchers compared student characteristics from *SENSE* respondents at colleges participating in the study with the characteristics of all students registered in the courses included in the sampling frame (all developmental reading, writing, and math courses and first college-level English and first college-level math course(s) offered at the colleges). After close examination of these results, the research team determined that there was sufficient bias at the national level in the part-time/full-time distribution of students (disproportionately more full-time responders) to warrant weighting the data based

on enrollment status. As a result, *SENSE* data are now weighted based on the most recent publicly available IPEDS data. Furthermore, the Center has added the capability of generating *SENSE* frequency and means reports using either weighted or unweighted data to the enhanced *SENSE* reporting website.

Weights and Local Student Characteristics

Under certain circumstances, deactivating weights may be a more informative way to examine institutional *SENSE* data.

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 *SENSE*, 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 shutting off the weights 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 full-time students to guide campus discussions.

SENSE encourages member colleges to carefully compare the student characteristics of their *SENSE* 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.

Attention: *SENSE* colleges!

*We have almost reached capacity for
the Entering Student Success Institute.
Secure a spot for your team today!*

**April 11-13, 2010
Austin, TX**

REGISTRATION
IS STILL OPEN AT
www.enteringstudent.org

Questions? Contact Angela Oriano-Darnall,
Assistant Director for *SENSE*, at 512-475-6526