National Survey of Student Engagement (NSSE) 2019 Results

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Introduction

The National Survey of Student Engagement (NSSE) is a brief, confidential, online survey that helps CSU better understand student behavior and the campus environment. NSSE asks students about their study habits, their educational plans and experiences, how they spend their time, and about their satisfaction with the campus, faculty, and curriculum. The NSSE yields data that CSU can use to improve the undergraduate experience both in and out of the classroom and provides us with indirect measures of success. The purpose of this report is to describe how CSU's 2019 data compares to our peers and to explore how the 2019 results have changed compared to 2016. First, a high-level summary of the results is provided and the NSSE survey is described in terms of its purpose and methodology.

Executive Summary

Overall, CSU scored higher than our peers for most of the engagement indicators and scores stayed approximately the same between 2016 and 2019 for both class levels. This section briefly describes the results for each theme of engagement within CSU's context.

Academic Challenge

In the area of Academic Challenge, CSU first-years and seniors scored higher than peers in most of the engagement indicators, but CSU's scores stayed relatively flat between 2016 and 2019. These NSSE items can be particularly useful for informing program review at the department level.

Learning with Peers

CSU's first-year and senior students scored higher than their peers for the Collaborative Learning indicator score but decreased (seniors) or scored similarly (first-years) for the Discussions with Diverse Others indicator. Scores were similar between the two NSSE administrations. These NSSE items can help inform peer-mentoring initiatives on campus as well as contribute to conversations about campus culture.

Experiences with Faculty

Both first-year and senior CSU students scored higher than their peers on ratings of student-faculty interactions but the same as their peers on ratings about instructor use of effective teaching practices. Student-Faculty Interaction scores increased between 2016 and 2019, but Effective Teaching Practices scores stayed the same. This area of the NSSE survey is useful for understanding student perceptions about how faculty are impacted by the professional development efforts occurring on campus.

Campus Environment

There are improvements in the items related to the quality of interactions students are having with all other constituents on campus and both class levels score higher than our peers for these items. The Supportive Environment scores stayed the same across the three years, however. This area of the NSSE survey can inform how campus culture is perceived by different groups of students.

High-Impact Practices

CSU students complete high impact activities at higher rates than first-year and senior students at peer institutions; however, the completion rate has stayed relatively the same across this time period. These measures of participation are useful for tracking our progress in higher completion rates of high-impact experiences and assessing if differences in participation rates exists by academic or demographic attribute.

NSSE Administration

NSSE is a census administration in the spring semester to all first-year and senior students that are enrolled in the proceeding fall semester. Therefore, the 2019 NSSE results include students that were enrolled in spring 2019 and fall 2018. The survey opens approximately on the fourth week of classes and remains open until the end of May; although, recruitment efforts and reminder emails only go through spring break. Since NSSE samples at these two student levels, results are always reported for first-year and senior students separately. Class level is defined by credit level and intentionally includes all types students (e.g. transfer, non-traditional, online) and is not limited to the first-time, full-time cohort.

CSU has done the NSSE survey since 2000 and repeats the survey every three years. This report includes data from the 2016 and the 2019 NSSE administrations. The NSSE survey underwent major changes in 2013 so the majority of longitudinal analyses are limited to these last two CSU administrations.

NSSE Engagement Indicators

The NSSE survey is built around Georg Kuh's work on student engagement theory[1], which is based on two critical features of collegiate quality. First, what students do when they are in college matters because their behavior influences their likelihood of success. Second, institutions have the ability to influence student behavior with policy, culture, and the structure of the curriculum. NSSE is the intersection of institutional conditions that influence student behavior and the results can help inform institutions on being student-ready[2].

NSSE measures engagement by using a combination of conceptual and empirical analysis to identify 10 survey constructs, or what NSSE calls Engagement Indicators, of effective educational practices. These 10 indicators are nestled within four broader themes of engagement. In addition to these constructs, NSSE also measures interest and completion of six high-impact activities. Table 1 below displays the engagement themes and indicators as well as the high-impact practices that are measured by the NSSE survey.

1 Student engagement in higher education : theoretical perspectives and practical approaches for diverse populations. (2019). New York, NY: Routledge.

2 McNair, T. (2016). Becoming a student-ready college: a new culture of leadership for student success. San Francisco, CA: Jossey-Bass.

Table 1: NSSE Engagement Themes, Indicators, and High-Impact Practices.

Theme	Engagement Indicators
Academic Challenge (AC)	Higher-Order Learning Reflective & Integrative Learning Learning Strategies Quantitative Reasoning
Learning with Peers (LWP)	Collaborative Learning Discussions with Diverse Others
Experiences with Faculty (EWF)	Student-Faculty Interaction Effective Teaching Practices
Campus Environment (CE)	Quality of Interactions Supportive Environment
High-Impact Practices (HIPs)	Service-Learning Learning Community Research with Faculty Internship or Field Experience Study Abroad Culminating Senior Experience

The purpose of clustering the NSSE items into these themes and indicators is to provide a more succinct way to evaluate the results; however, these indicators are on a 60-point scale that has limited absolute meaning. They are most useful for relative measures that allow comparison across groups. The engagement indicators can then be explored at the individual survey item level to help inform the meaning of the difference.

Internal and External Comparisons with the NSSE Items

This report focuses on two types of research questions: an internal comparison of the 2016 results relative to the 2019 results and an external comparison that benchmarks CSU's NSSE 2019 data to a group of peers. The internal comparison informs how student perceptions have changed over the last three years. Since the engagement premise is based on the intersection between students and institutional conditions, it is particularly useful to view CSU's longitudinal NSSE data with the timing of policy initiatives in mind. This report also focuses on an external comparison that benchmarks CSU's 2019 results against a group of peer institutions. Approximately 600 other institutions completed the NSSE survey in 2019 and among these participating institutions, the primary comparison group is selected based on having a land grant mission as well as undergraduate enrollment greater than 10,000. These 18 large land grant (LLG) universities are listed in table 2 below, and this is the group of students that CSU is compared against for all the peer comparisons in this report.

Table 2: Large Land Grant Comparison Group.

Auburn University (Auburn, AL)	Oklahoma State University (Stillwater, OK)	University of Connecticut (Storrs, CT)
Clemson University (Clemson, SC)	Oregon State University (Corvallis, OR)	University of Kentucky (Lexington, KY)
Kansas State University (Manhattan, KS)	Oregon State University (Corvallis, OR)	University of Nebraska at Lincoln (Lincoln, NE)
Louisiana State University and Agricultural & Mechanical College (Baton Rouge, LA)	South Dakota State University (Brookings, SD)	University of New Hampshire (Durham, NH)
Mississippi State University (Mississippi State, MS)	University of Arizona, The (Tucson, AZ)	University of Rhode Island (Kingston, RI)
Ohio State University, The (Columbus, OH)	University of Arkansas (Fayetteville, AR)	Washington State University (Pullman, WA)

NSSE Response Rates and Sample Demographic Representation

The NSSE yields data that CSU can use to improve the undergraduate experience both in and out of the classroom. Not all students that are invited to participate in NSSE complete the survey, so survey samples must be evaluated for response bias for the NSSE results to be meaningful. The purpose of this section is to report the 2019 response rate and examine the quality of CSU's NSSE sample by comparing the sample demographic statistics to the overall population parameters in order to assess the degree to which the sample represents the population.

Table 3 below displays the response rate for the 2019 NSSE administration across both class levels.

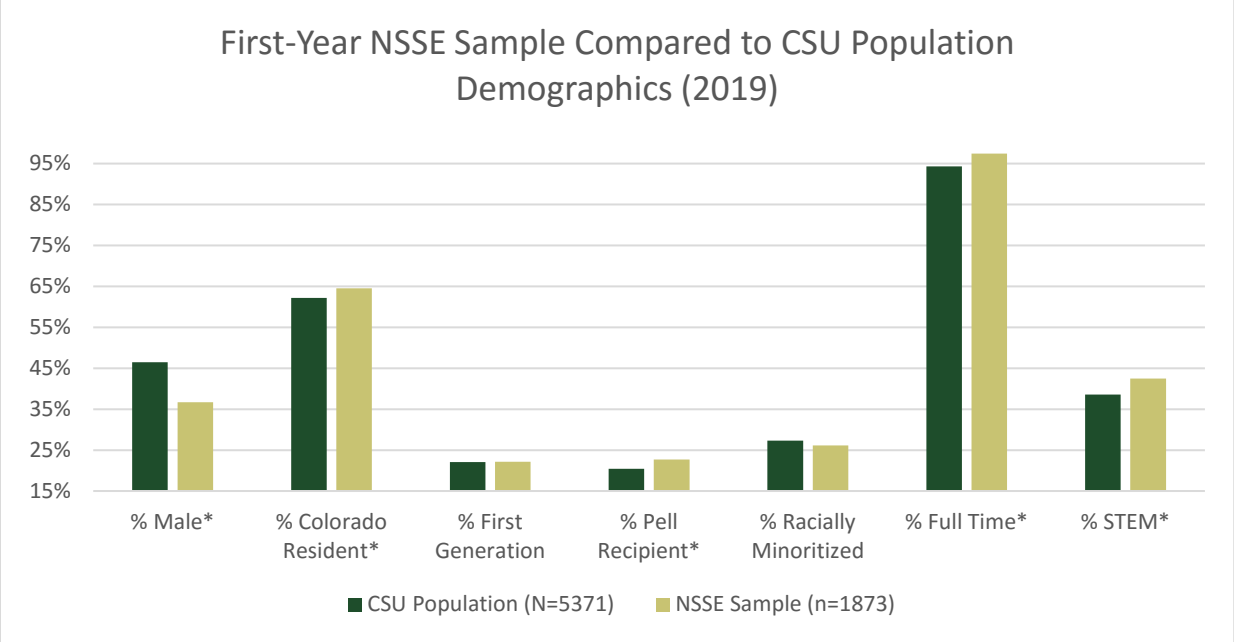
Table 3: NSSE 2019 Population, Sample Size, and Response Rate by Class Level.

	Population	NSSE Participants	Response Rate	Comparison Group[1]
First-Year	5371	1873	34.9%	19%
Seniors	5923	2084	35.2%	17%

[1]Comparison group is large land grant institutions that participated in the 2019 NSSE survey

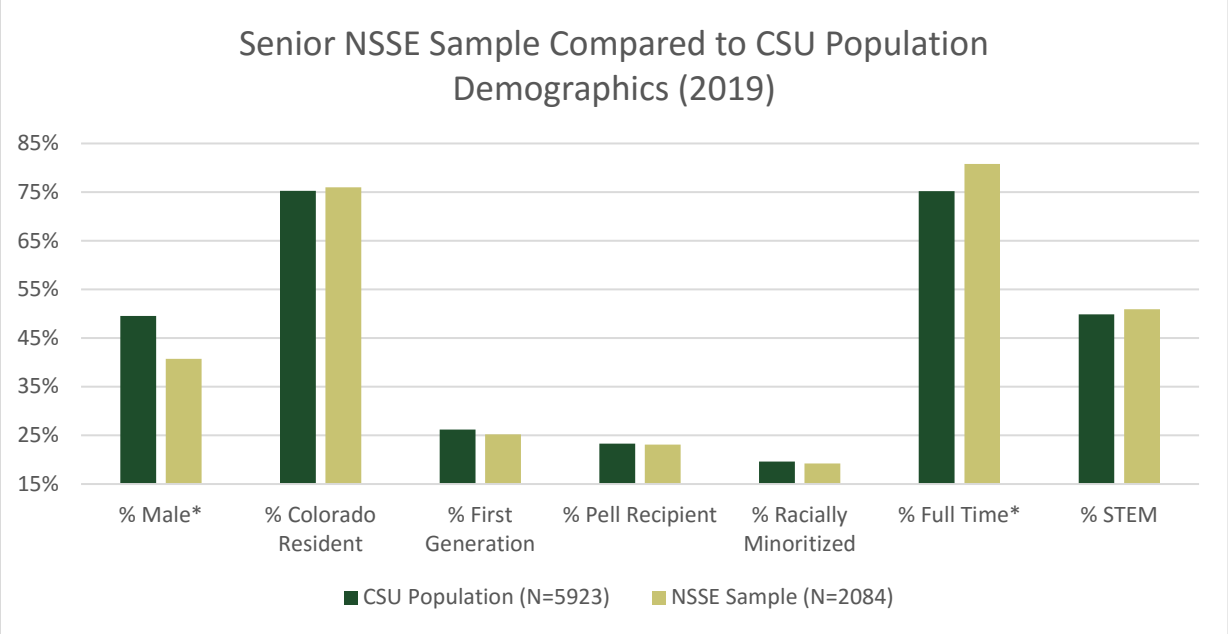
CSU's response rates have greatly exceeded our peer group both in 2019 and in 2016. Although CSU has a high response rate, the 2019 NSSE sample does appear to be biased. The figures below display the sample demographic statistics compared to the CSU population parameters for first-year and seniors in order to explore groups on campus that are either under or overrepresented in the 2019 NSSE sample.

Figure 1: 2019 First-Year NSSE Sample Demographic Statistics Compared to CSU Population Parameters.



Among the first-year NSSE sample, male students are substantially underrepresented (36.7% NSSE, 46.5% CSU); this finding is in line with most survey research at CSU and nationwide. First generation students and racially minoritized students are proportionally represented, while Pell, Colorado residents, STEM majors, and full-time students are slightly overrepresented in the NSSE sample. Figure 2 below displays the same information for seniors.

Figure 2: 2019 Senior NSSE Sample Demographic Statistics Compared to CSU Population Parameters.



Among seniors, we observe that CSU population proportions for Colorado residency, first generation status, Pell status, and racially minoritized status all fall within a level of statistical non-significance.

Males and part-time students remain underrepresented, as expected. The table below compares academic preparation as well as academic performance variables for first-year and seniors in the NSSE sample compared to the CSU population.

Table 4: 2019 First-Year and Senior NSSE Sample Academic Performance Compared to CSU Population.

	CSU First-Year	NSSE First-Year	CSU Seniors	NSSE Seniors
High School GPA	3.64	3.74	3.70	3.79
CCHE Index	115.3	117.9	116.8	119.0
CSU GPA	2.99	3.18	3.16	3.27

Note: the differences for all academic measures between the sample and population are statistically significant for both class levels

On measures of academic preparation (high school GPA and CCHE index), NSSE first-year and senior measures are substantially higher than the corresponding CSU population. First-year and senior NSSE participants also significantly outscore the overall CSU population on GPA. Overall, CSU's NSSE sample is biased towards students with higher levels of academic preparation as well as higher levels of academic performance at CSU.

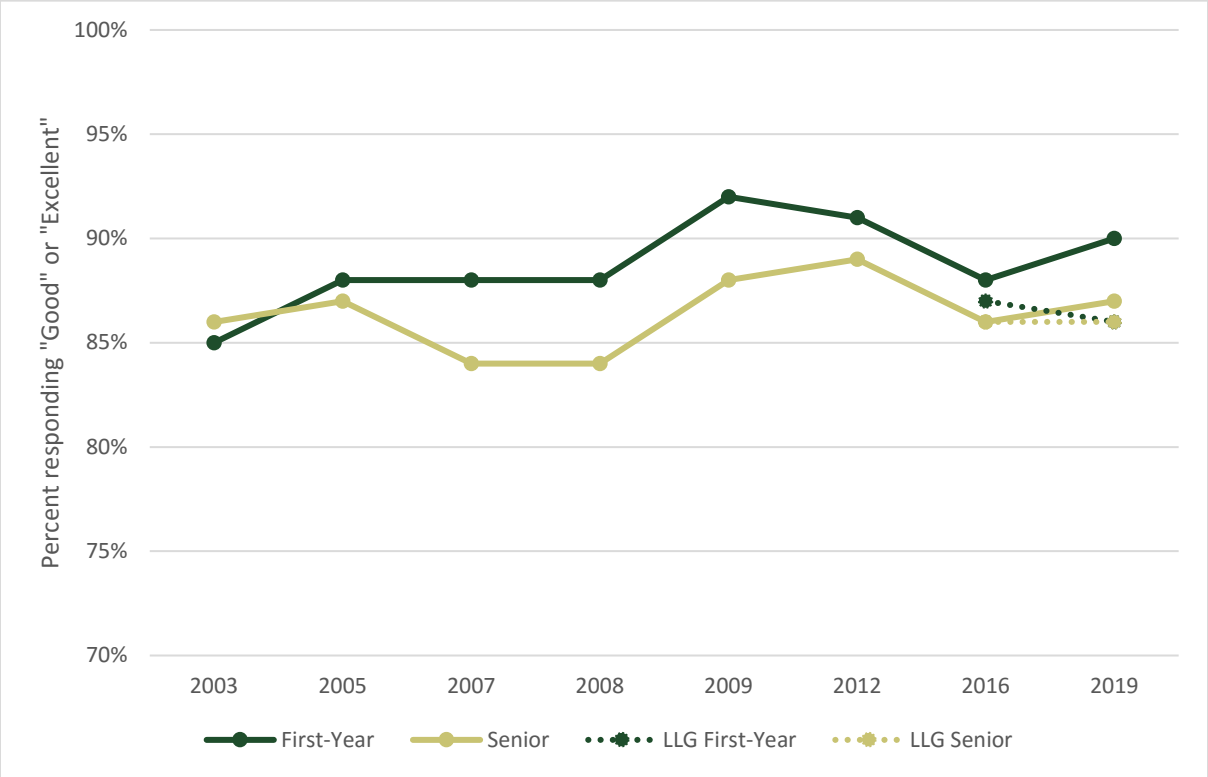
CSU's NSSE sample is not a perfect representation of CSU's population because female and full-time students are overrepresented. It does appear, however, to be representative of first generation students, Pell Grant recipients, and racially minoritized students. Thus, the sample is not proportionally representative in some expected ways, but overall is a useful data source for exploring levels of student engagement. The response bias in the 2019 NSSE data are in line with prior CSU NSSE samples.

This section introduced the purpose of NSSE and the administration of the survey instrument, the rest of the report will focus on discussing the NSSE results. The following section reviews data regarding student satisfaction.

Student Satisfaction

Two NSSE items address students' satisfaction with their institution. Figure 3 illustrates the percentage of students who responded "Good" or "Excellent" when asked to evaluate their entire educational experience at their institution. Figure 4 displays the percentage of students who responded "Probably yes" or "Definitely yes" when asked if they would choose the same institution they are now attending if they could start over again.

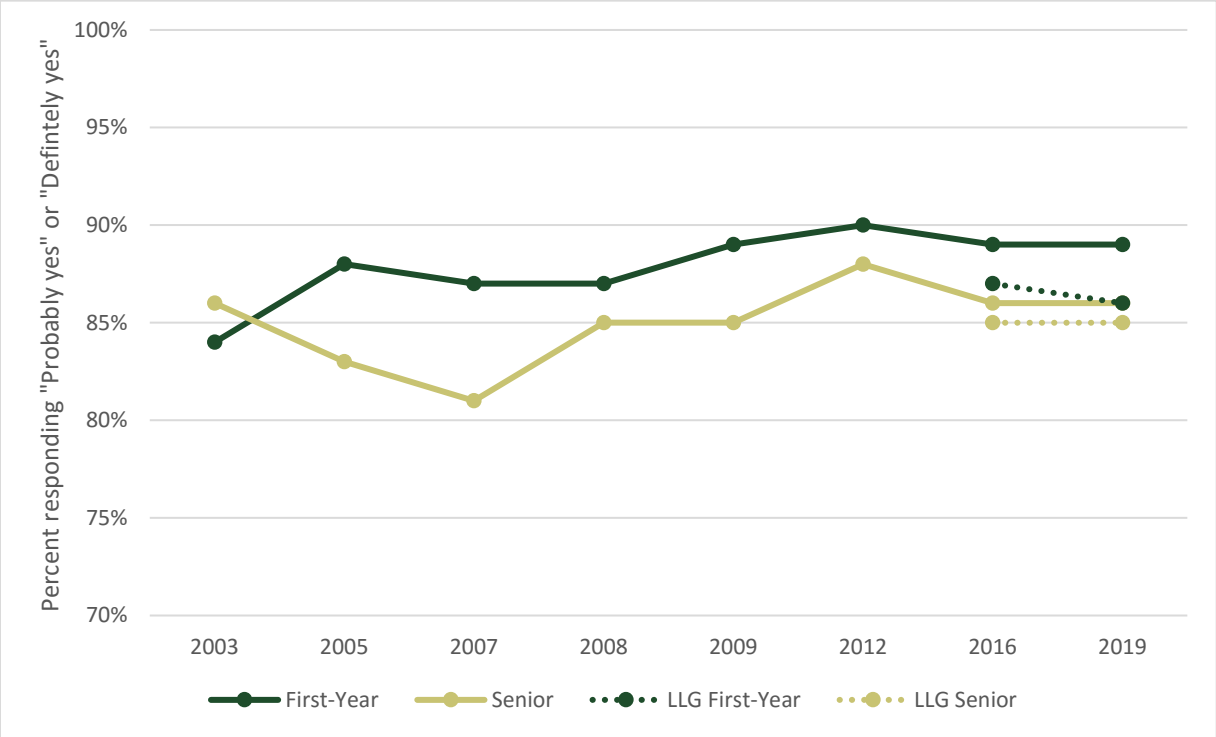
Figure 2: How would you rate the quality of your education experience?



About 90% of CSU first-year students rated the quality of their education experience as good or excellent in 2019 compared to 86% of first-year students in the LLG comparison group. This difference is statistically significant. Additionally, the 2019 results are an increase of 2 PP compared to the percent of CSU first-year students that rated their educational experience as good or excellent in 2016 (about 88%). Historically, about 85%-90% of first-year students at CSU rate their education experience as good or excellent. The results from 2019 are the third highest percentage we have ever received on this metric.

About 87% of seniors at CSU rated the quality of their education experience as good or excellent compared to 86% of seniors in the LLG comparison group. This difference is not statistically significant. CSU seniors' overall satisfaction with their educational experience increased by 1 PP between 2016 and 2019, from 86% to 87%. Historically, about 84%-89% of seniors at CSU rate their educational experience as good or excellent. These results from 2019 are tied for the third highest percentage CSU has ever received in this metric.

Figure 3: If you could start over again, would you choose CSU?



89% of CSU first-year students answered in the positive about choosing CSU if they were to start over again, compared to 86% first-year students in the LLG comparison group. This 3 PP difference is statistically significant. The percentage of CSU first-year students who answered in the positive to this question stayed the same as in 2016 and track in-line with our results over the last 15 years.

86% of seniors at CSU answered in the positive about their choosing CSU if they were to start over again, compared to 85% of seniors in the LLG comparison group. This difference is not statistically significant. The percentage of seniors who answered in the positive to this item remained the same between 2016 and 2019 for students at CSU but is lower than our highest response year in 2012.

The remainder of the report reviews CSU 2019 scores for both first-year and senior students across all engagement indicators compared to 2016 results. Additionally, these sections highlight items from the 2019 survey for which CSU's results are significantly higher or lower than those of the LLG comparison group. The first theme, Academic Challenge, and its four engagement indicators are the focus of the next section.

Academic Challenge

The Academic Challenge theme groups together engagement indicators that address the important role that colleges and universities play in promoting student learning by challenging students to do more. Four engagement indicators are a part of this theme: Higher-Order Learning, Reflective and Integrative Learning, Learning Strategies, and Quantitative Reasoning.

Higher-Order Learning Engagement Indicator

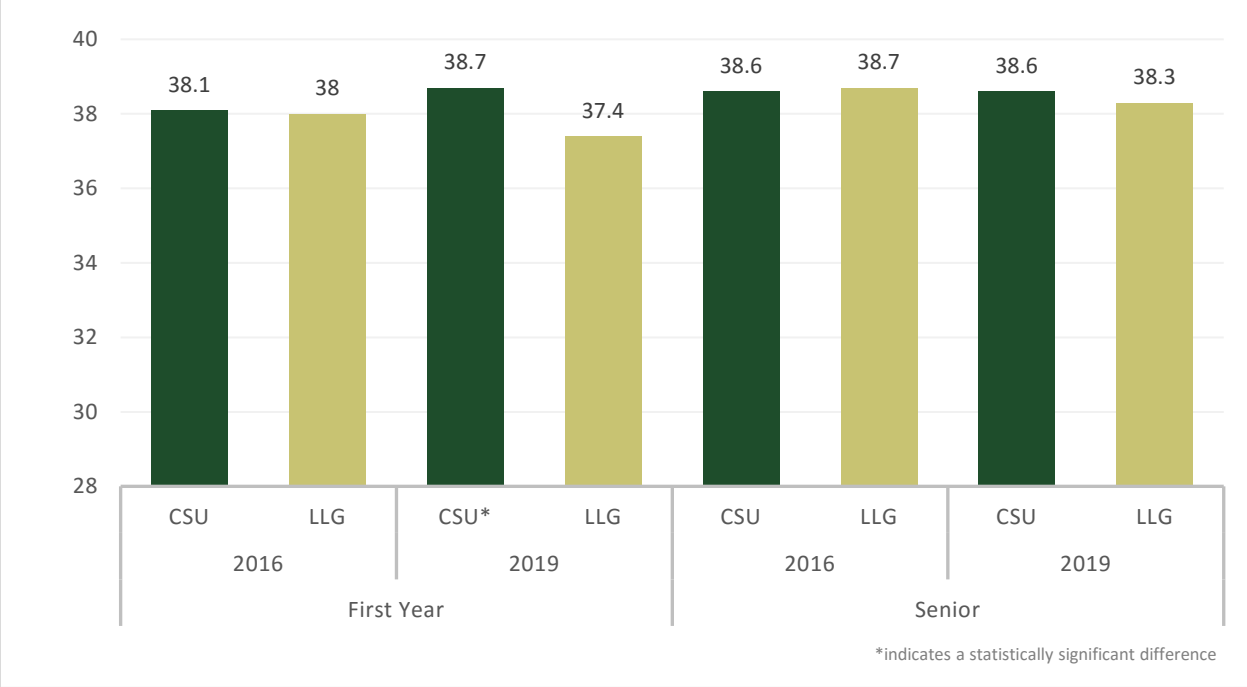
The Higher-Order Learning (HOL) engagement indicator measures how much institutions are emphasizing student engagement in complex cognitive tasks that require more than memorization of

facts. Items address to what extent coursework has emphasized memorization, application of knowledge to practical problems, analysis, evaluation of sources, and synthesizing of knowledge into new ideas.

Higher-Order Learning Benchmark Comparison

Figure 5 displays the mean score on the HOL engagement indicator for CSU first-year and senior students compared to first-year and senior students in the LLG comparison group in both the 2016 and 2019 surveys.

Figure 4: Higher-Order Learning Peer Comparison.



CSU first-year students have higher mean scores than first-year students in the LLG group in both 2016 and 2019. This difference is very small and not statistically significant in 2016 (.1) but is larger and statistically significant in 2019 (1.3). It should be noted that this larger difference still has a statistical effect size that is relatively small (Cohen's d =.1) indicating that the practical importance of this difference is relatively small. Additionally, while HOL scores decreased for students in the LLG group over this time period, they increased for CSU students. The average score for this construct among first-year students at CSU increased .6 of an engagement indicator point from 2016 to 2019.

CSU seniors have lower mean scores than students in the LLG group in 2016 by .1 points and a higher mean score by .3 points in 2019, but neither of these differences are statistically significant. The mean score for CSU seniors during this time period stayed the same, but the mean score for the LLG group decreased.

Higher Order Learning Survey Items

The HOL engagement indicator shows a slight increase in the mean score for first-year students in 2019 compared to 2016 as well as a statistically significant difference in the mean score for CSU first-year students compared to first-year students in the LLG comparison group in 2019. This section explores the individual survey item responses that contribute to these differences.

Item Level Higher Order Learning Change at CSU from 2016

Table 5 displays the survey items that are used to create the HOL construct and displays the percent of first-year students that responded "Very much" or "Quite a bit" to each item. The table highlights which survey items contributed to the .6 increase in the HOL indicator among first-year CSU students in 2019 compared to 2016.

Table 5: Higher-Order Learning Items Change from 2016 for First-Year Students.

Percentage of first-year CSU students responding "Very much" or "Quite a bit" about how much coursework emphasized…	2019	PP Change from 2016
Applying facts, theories, or methods to practical problems or new situations	75	1
Analyzing an idea, experience, or line of reasoning in depth by examining its parts	72	0
Evaluating a point of view, decision, or information source	71	3
Forming a new idea or understanding from various pieces of information	71	4

First-year students at CSU have positive gains in the response distribution on three of the four survey questions in 2019 compared to 2016. For instance, 71% of CSU first-year students responded in the positive about forming a new idea or understanding from various pieces of information in 2019 compared to 68% in 2016, which is a 4-percentage point (PP) change.

Item Level Higher-Order Learning Peer Comparisons

In order to understand the survey questions that contributed to the statistically significant difference in the HOL construct for CSU first-year students in 2019 compared to first-year students in the LLG comparison group, the response distribution for survey items with large differences are presented in tables 6 and 7 below.

Table 6: First-Year Response Distribution: Student responses to how much coursework emphasized evaluating a point of view, decision, or information source.

	Sample Size	Very little	Some	Quite a bit	Very much
CSU	1,722	4%	26%	47%	24%
Large Land Grant	13,227	6%	31%	44%	20%
Percentage Point (PP) Difference		-2.0	-5.0	3.0	4.0

Table 6 shows that 71% of first-year students surveyed at CSU felt that their coursework emphasized evaluating a point of view, decision or information source quite a bit or very much compared to 64% of students surveyed in the LLG comparison group, a 7 PP difference.

Table 7: First-Year Response Distribution: Student responses to how much coursework emphasized forming a new idea or understanding from various pieces of information.

	Sample Size	Very little	Some	Quite a bit	Very much
CSU	1,716	3%	26%	48%	23%
Large Land Grant	13,176	5%	29%	45%	20%
Percentage Point (PP) Difference		-2.0	-3.0	3.0	3.0

Table 7 shows that 71% of first-year students surveyed at CSU felt that their coursework emphasized forming a new idea or understanding from various pieces of information quite a bit or very much, compared to 65% of students surveyed in the LLG comparison group, a 6 PP difference.

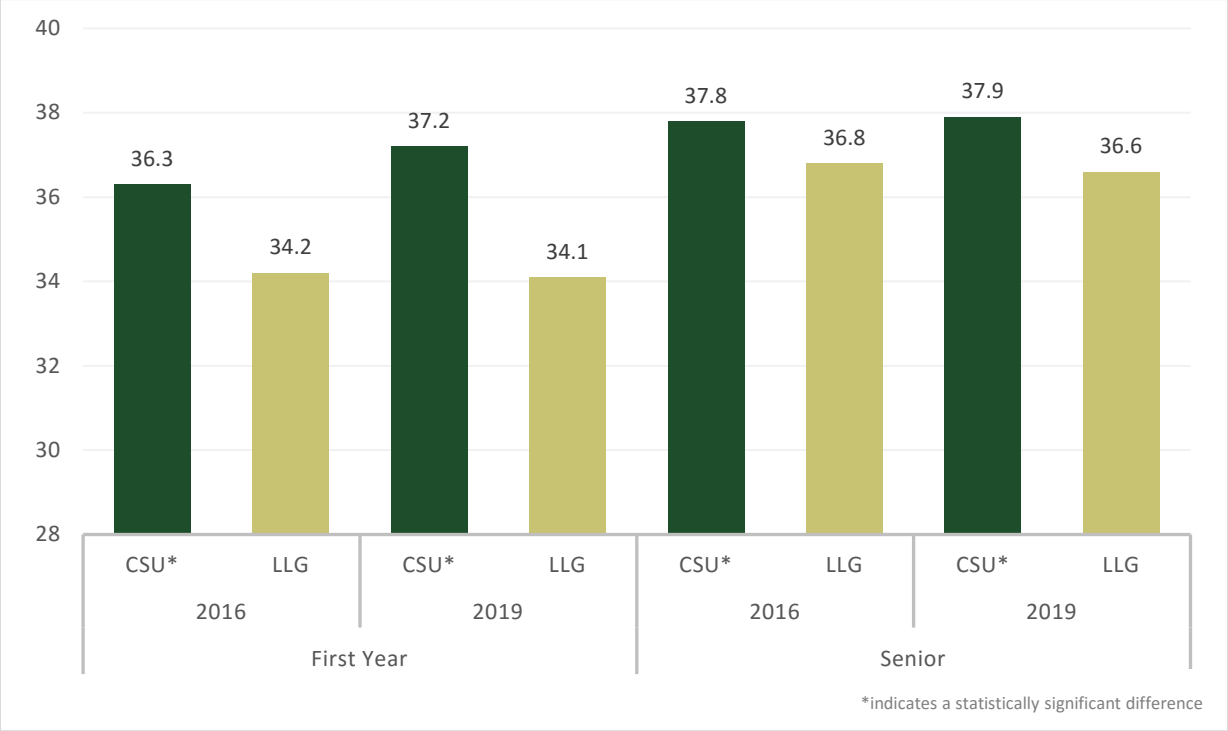
Reflective & Integrative Learning Engagement Indicator

The central theme of the RIL engagement indicator is to measure how much instructors are motivating students to make connections between course material and the world around them, to reexamine their own beliefs, and to consider other perspectives. Among others, items address how often students are combining ideas from different courses, connecting their learning to societal issues, considering diverse perspectives in discussions or assignments, and examining the strengths and weaknesses of their own views.

Reflective & Integrative Learning Benchmark Comparison

Figure 6 displays the mean score on the RIL engagement indicator for CSU first-years and seniors compared to first-year and senior students in the LLG comparison group in both the 2016 and 2019 surveys.

Figure 5: Reflective & Integrative Learning Peer Comparison.



CSU first-year students have higher mean scores than first-year students in the LLG group in both 2016 and 2019. This difference is very small but statistically significant in 2016 (2.1) with a very small effect size (Cohen's d = .16). In 2019, the difference is larger and statistically significant (3.1), but its statistical effect size is still small (Cohen's d = .27) indicating that the practical importance of this difference is small. Additionally, while RIL scores decreased by .1 of an engagement indicator point for first-year students in the LLG group from 2016 to 2019, they increased for CSU first-years by .9 of an engagement indicator point over this time period.

CSU seniors' mean scores are also higher than those of students in the LLG group in both 2016 and 2019. The difference is small but statistically significant in both 2016 (1) and 2019 (1.3). Effect sizes are small in

both 2016 (Cohen's d = .07) and 2019 (Cohen's d = .11) indicating that the practical importance of these differences is small. While RIL scores decreased by .2 of an engagement indicator point for seniors in the LLG group over this time period, they increased for CSU seniors by .1 of an engagement indicator point.

Reflective & Integrative Learning Survey Items

Both first-year and senior CSU students score higher on the RIL indicator compared to first-years and seniors in the LLG comparison group in 2019. CSU first-year students saw an increase in 2019 compared to 2016. In contrast, the comparison groups (both class levels) and CSU seniors had relatively similar score changes in 2019 compared to 2016. This section explores the RIL items that contributed to the statistically significant positive difference for first-year and senior CSU students compared to their LLG peers as well as the changes for first-year CSU students in 2019 compared to 2016.

Item Level Reflective & Integrative Learning Change at CSU from 2016

Table 8 displays the survey items that are used to create the RIL construct and displays the percent of first-year students that responded "Very often" or "Often" to the survey questions. The table highlights which survey items contributed to the .9 increase in the RIL mean score among first-year CSU students in 2019 compared to 2016.

Table 8: Reflective & Integrative Learning Items Change from 2016 for First-Year Students.

Percentage of first-year CSU students who responded that they "Very often" or "Often"…	2019	PP Change from 2016
Combined ideas from different courses when completing assignments	61	1
Connected your learning to societal problems or issues	58	0
Included diverse perspectives (political, religious, racial/ethnic, gender, etc.) in course discussions or assignments	54	2
Examined the strengths and weaknesses of your own views on a topic or issue	71	6
Tried to better understand someone else's views by imagining how an issue looks from his or her perspective	77	8
Learned something that changed the way you understand an issue or concept	72	2
Connected ideas from your courses to your prior experiences and knowledge	83	5

First-year students at CSU have positive gains in the response distribution on six of the seven survey questions in 2019 compared to 2016. For example, 77% of CSU first-year students responded that they very often or often tried to better understand someone else's views by imagining how an issue looks from his or her perspective in 2019 compared to 69% in 2016, which is an 8 PP change.

Item Level Reflective & Integrative Learning First-Year Peer Comparisons

In order to understand the survey questions that contributed to the statistically significant difference in the RIL construct for CSU first-years in 2019 compared to first-years in the LLG comparison group, the response distribution for survey items with large differences are presented in tables 9 through 15 below.

Table 9: First-Year Response Distribution: Student responses to how often they combined ideas from different courses when completing assignments.

	Sample Size	Never	Sometimes	Often	Very often
CSU	1,819	4%	35%	43%	18%
Large Land Grant	14,598	8%	40%	38%	13%
Percentage Point (PP) Difference		-4.0	-5.0	5.0	5.0

Table 9 shows that 61% of first-year students surveyed at CSU felt that they combined ideas from different courses when completing assignments often or very often, compared to 51% of students surveyed in the LLG comparison group, a 10 PP difference.

Table 10: First-Year Response Distribution: Student responses to how often they connected their learning to societal problems or issues.

	Sample Size	Never	Sometimes	Often	Very often
CSU	1,815	6%	36%	40%	18%
Large Land Grant	14,497	11%	41%	34%	13%
Percentage Point (PP) Difference		-5.0	-5.0	6.0	5.0

Table 10 shows that 58% of first-year students surveyed at CSU felt that they connected their learning to societal problems or issues often or very often, compared to 47% of students surveyed in the LLG comparison group, an 11 PP difference.

Table 11: First-Year Response Distribution: Student responses to how often they included diverse perspectives (political, religious, racial/ethnic, gender, etc.) in course discussions or assignments.

	Sample Size	Never	Sometimes	Often	Very often
CSU	1,809	9%	37%	36%	18%
Large Land Grant	14,374	13%	41%	32%	14%
Percentage Point (PP) Difference		-4.0	-4.0	4.0	4.0

Table 11 shows that 54% of first-year students surveyed at CSU felt that they included diverse perspectives in course discussions or assignments often or very often, compared to 46% of students surveyed in the LLG comparison group, an 8 PP difference.

Table 12: First-Year Response Distribution: Student responses to how often they examined the strengths and weaknesses of their own views on a topic or issue.

	Sample Size	Never	Sometimes	Often	Very often
CSU	1,799	3%	27%	51%	20%
Large Land Grant	14,226	5%	34%	44%	16%
Percentage Point (PP) Difference		-2.0	-7.0	7.0	4.0

Table 12 shows that 71% of first-year students surveyed at CSU felt that they examined the strengths and weaknesses of their own views on a topic or issue often or very often, compared to 60% of students surveyed in the LLG comparison group, an 11 PP difference.

Table 13: First-Year Response Distribution: Student responses to how often they tried to better understand someone else's views by imagining how an issue looks like from their perspective.

	Sample Size	Never	Sometimes	Often	Very often
CSU	1,784	2%	22%	51%	26%
Large Land Grant	14,045	3%	29%	46%	22%
Percentage Point (PP) Difference		-1.0	-7.0	5.0	4.0

Table 13 shows that 77% of first-year students surveyed at CSU felt that they tried to better understand someone else's views by imagining how an issue looks from their perspective often or very often, compared to 68% of students surveyed in the LLG comparison group, a 9 PP difference.

Table 14: First-Year Response Distribution: Student responses to how often they learned something that changed the way they understand an issue or concept.

	Sample Size	Never	Sometimes	Often	Very often
CSU	1,769	1%	27%	49%	23%
Large Land Grant	13,871	3%	33%	45%	19%
Percentage Point (PP) Difference		-2.0	-6.0	4.0	4.0

Table 14 shows that 72% of first-year students surveyed at CSU felt that they learned something that changed the way they understand an issue or concept often or very often, compared to 64% of students surveyed in the LLG comparison group, an 8 PP difference.

Table 15: First-Year Response Distribution: Student responses to how often they connected ideas from their courses to their prior experiences and knowledge.

	Sample Size	Never	Sometimes	Often	Very often
CSU	1,764	1%	16%	52%	31%
Large Land Grant	13,718	1%	22%	51%	25%
Percentage Point (PP) Difference		0.0	-6.0	1.0	6.0

Table 15 shows that 83% of first-year students surveyed at CSU felt that they connected ideas from their courses to their prior experiences and knowledge often or very often, compared to 76% of students surveyed in the LLG comparison group, a 7 PP difference.

Item Level Reflective & Integrative Learning Seniors Peer Comparisons

In order to understand the survey questions that contributed to the statistically significant difference in the RIL construct mean score for CSU seniors in 2019 compared to the mean score for seniors in the LLG comparison group, the response distribution for survey items with large differences are presented in tables 16 through 19 below.

Table 16: Senior Response Distribution: Student responses to how often they combined ideas from different courses when completing assignments.

	Sample Size	Never	Sometimes	Often	Very often
CSU	2,047	2%	22%	44%	32%
Large Land Grant	16,993	3%	26%	43%	27%
Percentage Point (PP) Difference		-1.0	-4.0	1.0	5.0

Table 16 shows that 76% of seniors surveyed at CSU felt that they combined ideas from different courses when completing assignments often or very often, compared to 70% of seniors surveyed in the LLG comparison group, a 6 PP difference.

Table 17: Senior Response Distribution: Student responses to how often they examined the strengths and weaknesses of their own views on a topic or issue.

	Sample Size	Never	Sometimes	Often	Very often
CSU	2,040	5%	28%	47%	20%
Large Land Grant	16,700	6%	33%	43%	19%
Percentage Point (PP) Difference		-1.0	-5.0	4.0	1.0

Table 17 shows that 67% of seniors surveyed at CSU felt that they examined the strengths and weaknesses of their own views on a topic or issue often or very often, compared to 62% of seniors surveyed in the LLG comparison group, a 5 PP difference.

Table 18: Senior Response Distribution: Student responses to how often they tried to better understand someone else's views by imagining how an issue looks like from their perspective.

	Sample Size	Never	Sometimes	Often	Very often
CSU	2,025	3%	22%	49%	25%
Large Land Grant	16,531	4%	27%	45%	25%
Percentage Point (PP) Difference		-1.0	-5.0	4.0	0.0

Table 18 shows that 74% of seniors surveyed at CSU felt that they tried to better understand someone else's views by imagining how an issue looks like from their perspective often or very often, compared to 70% of seniors surveyed in the LLG comparison group, a 4 PP difference.

Table 19: Senior Response Distribution: Student responses to how often they learned something that changed the way they understand an issue or concept.

	Sample Size	Never	Sometimes	Often	Very often
CSU	2,013	2%	23%	47%	28%
Large Land Grant	16,384	3%	29%	44%	24%
Percentage Point (PP) Difference		-1.0	-6.0	3.0	4.0

Table 19 shows that 75% of seniors surveyed at CSU felt that they learned something that changed the way they understand an issue or concept often or very often, compared to 68% of seniors surveyed in the LLG comparison group, a 7 PP difference.

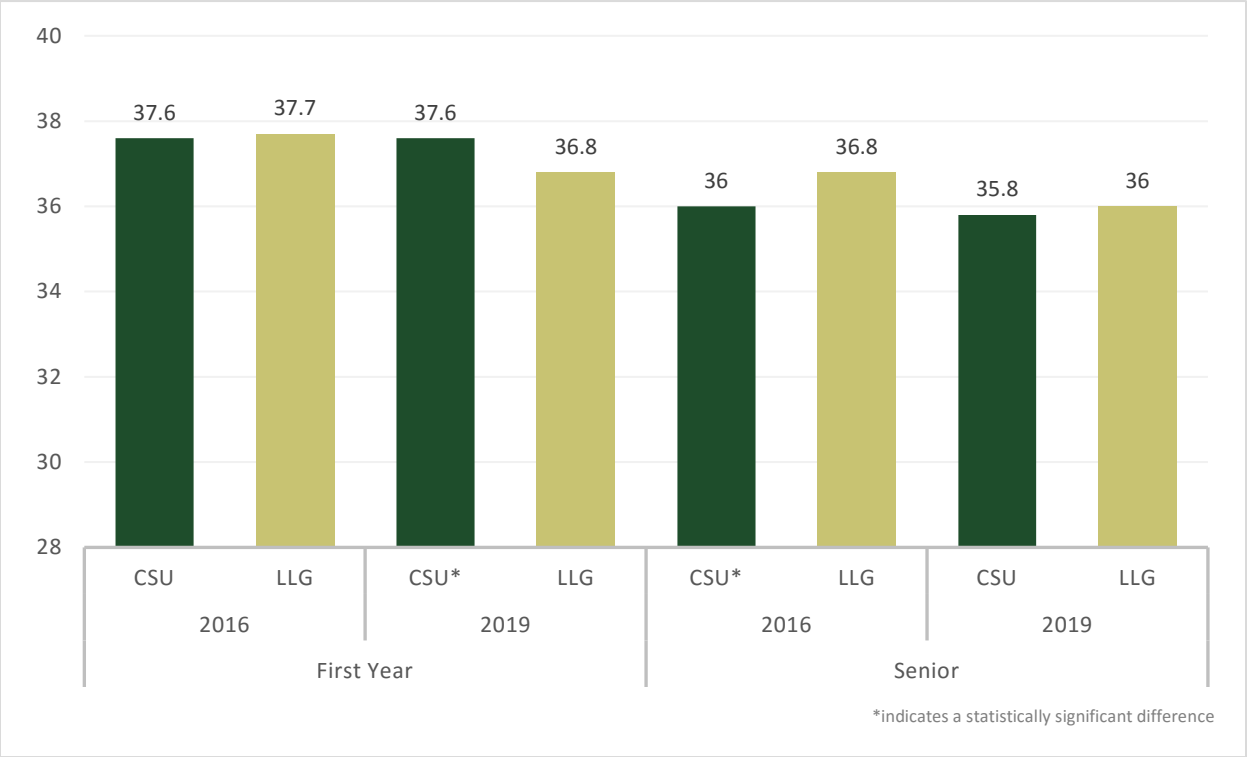
Learning Strategies Engagement Indicator

The Learning Strategies (LS) engagement indicator measures how often students are enhancing their learning and retention by moving beyond approaching learning as absorption. This engagement indicator asks students how often they are actively engaging with and analyzing course material. Items address the extent to which students are identifying key information from reading assignments, reviewing their notes after class, and summarizing what they have learned in class or from course materials.

Learning Strategies Benchmark Comparison

Figure 7 displays the mean score on the LS engagement indicator for CSU first-year and senior students compared to first-year and senior students in the LLG comparison group in both the 2016 and 2019 surveys.

Figure 6: Learning Strategies Peer Comparison.



CSU first-year students have lower mean scores than first-year students in the LLG group in 2016 and higher mean scores in 2019. The difference is very small and not statistically significant in 2016 (.1), but slightly larger and statistically significant in 2019 (.8). Please note the statistically significant difference in 2019 has a practical difference that is relatively small (Cohen's d =.06). It is important to point out that the average score for this construct among first-year students at CSU remained the same between 2016 and 2019. As a result, CSU's increase relative to first-year peers in 2019 compared to 2016 is due to a decrease in .9 of an engagement indicator point of LLG scores.

CSU seniors have lower mean scores than students in the LLG group by .8 of an engagement indicator point in 2016 and by .2 of an engagement indicator point in 2019. This difference is only statistically significant in 2016, but with a small statistical effect (Cohen's d= -.06). The LS construct average score for both CSU and LLG group seniors decreased between 2016 and 2019, but the decrease is a larger magnitude for the LLG group.

Learning Strategies Survey Items

The LS engagement indicator shows a statistically significant difference in the mean score for CSU first-year students compared to the mean score for first-year students in the LLG comparison group in 2019. This section explores the individual survey item responses that contribute to these differences.

Item Level Learning Strategies First-Year Peer Comparisons

In order to understand which survey items contribute to the statistically significant positive difference in the LS construct mean score for CSU first-year students in 2019 compared to the mean score for first-year students in the LLG comparison group, the response distribution for survey items with large differences are presented in table 20 below.

Table 20: First-Year Response Distribution: Student responses to how often they identified key information from reading assignments.

	Sample Size	Never	Sometimes	Often	Very often
CSU	1,664	1%	22%	52%	25%
Large Land Grant	12,568	3%	26%	48%	23%
Percentage Point (PP) Difference		-2.0	-4.0	4.0	2.0

Table 20 shows that 77% of first-year students surveyed at CSU felt that they identified key information from reading assignments often or very often, comparted to 71% of students surveyed at LLG universities, a 6 PP difference.

This construct includes two additional items which ask students how often they reviewed their notes after class and how often they summarized what they learned in class or from course materials. For both items, CSU first-year students responded in the positive at slightly higher rates than first-years in the LLG comparison group, but these differences were not practically important.

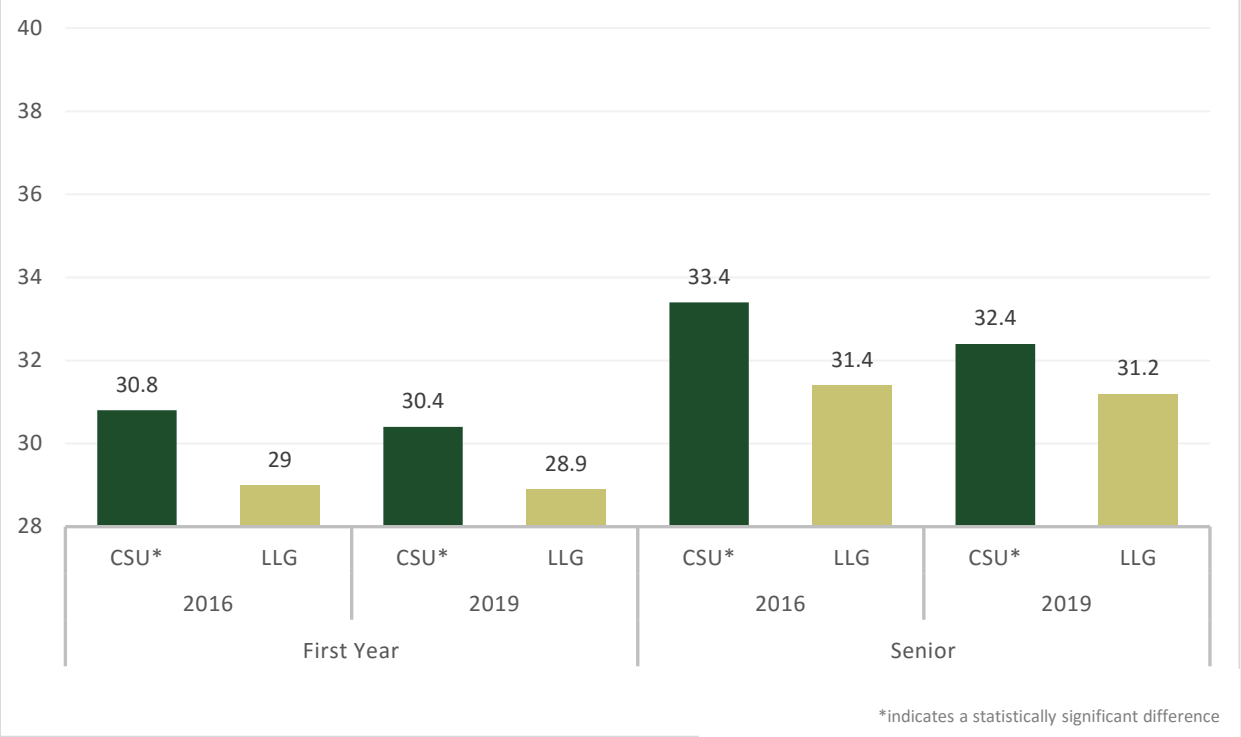
Quantitative Reasoning Engagement Indicator

The Quantitative Reasoning (QR) engagement indicator measures how often students have evaluated, supported, and critiqued arguments using numerical and statistical information. Items address the extent to which students have reached conclusions based on their own analysis of numerical information, used numerical information to examine real-world problems or issues, and evaluated what others have concluded from numerical information.

Quantitative Reasoning Benchmark Comparison

Figure 8 displays the mean score on the QR engagement indicator for CSU first-year and senior students compared to first-year and senior students in the LLG comparison group in both the 2016 and 2019 surveys.

Figure 7: Quantitative Reasoning Peer Comparison.



CSU first-year students have higher mean scores than first-year students in the LLG group in both 2016 and 2019. This difference is statistically significant in both 2016 (1.8) and 2019 (1.5). The statistical effect sizes in 2016 (Cohen's d=.12) and 2019 (Cohen's d=.10) are small, indicating a relatively small practical importance of this difference. Additionally, QR scores decreased slightly for first-year students at CSU and in the LLG comparison group between 2016 and 2019 and the decrease is of a bigger magnitude for CSU.

CSU seniors also have higher mean scores than students in the LLG group in both 2016 and 2019. The difference is also statistically significant in 2016 (2) and 2019 (1.2). Statistical effect sizes in 2016 (Cohen's d=.12) and 2019 (Cohen's d=.08) are small, indicating once again that the practical importance of this difference is relatively small. QR scores decreased at a smaller magnitude for seniors at CSU compared to the decrease for the LLG comparison group.

Quantitative Reasoning Survey Items

The QR engagement indicator shows a decrease in the mean score for senior students at CSU in 2019 compared to 2016. Additionally, it shows a statistically significant difference in the mean score for both CSU first-year students and CSU seniors compared to their peers in the LLG comparison group in 2019. This section explores the QR items that contribute to these changes.

Item Level Quantitative Reasoning Change at CSU from 2016

Table 21 displays the survey items that are used to create the QR construct and displays the percent of seniors that responded "Very often" or "Often" to each item. The table highlights which survey items contributed to the 1-point decrease in the QR mean score among CSU seniors in 2019 compared to 2016.

Table 21: Quantitative Reasoning Items Change from 2016 for Seniors.

Percentage of CSU seniors who responded that they "Very often" or "Often"...	2019	PP Change from 2016
Reached conclusions based on your own analysis of numerical information (numbers, graphs, statistics, etc.)	60	-2
Used numerical information to examine a real-world problem or issue (unemployment, climate change, public health, etc.)	49	-1
Evaluated what others have concluded from numerical information	54	0

Seniors at CSU had decreases in the response distribution on two survey questions and no change in the third in 2019 compared to 2016. For example, 60% of CSU seniors responded that they very often or often reached conclusions based on their own analysis of numerical information in 2019 compared to 62% in 2016, which is a 2 PP decrease.

Item Level Quantitative Reasoning First-Year Peer Comparisons

In order to understand the survey questions that contributed to the statistically significant difference in QR construct for CSU first-years in 2019 compared to first-year students in the LLG comparison group, the response distribution for survey items with large differences are presented in tables 22 and 23 below.

Table 22: First-Year Response Distribution: Student responses to how often they used numerical information to examine a real-world problem or issue.

	Sample Size	Never	Sometimes	Often	Very often
CSU	1,682	15%	40%	33%	13%
Large Land Grant	12,773	19%	41%	29%	12%
Percentage Point (PP) Difference		-4.0	-1.0	4.0	1.0

Table 22 shows that 46% of first-year students surveyed at CSU felt that they used numerical information to examine a real-world problem or issue often or very often, compared to 41% of first-year students surveyed in the LLG comparison group, a 5 PP difference.

Table 23: First-Year Response Distribution: Student responses to how often they evaluated what others have concluded from numerical information.

	Sample Size	Never	Sometimes	Often	Very often
CSU	1,675	10%	43%	35%	11%
Large Land Grant	12,737	15%	44%	31%	10%
Percentage Point (PP) Difference		-5.0	-1.0	4.0	1.0

Table 23 shows that 46% of first-year students surveyed at CSU felt that they evaluated what others concluded from numerical information often or very often, compared to 41% of students surveyed in the LLG comparison group, a 5 PP difference.

Item Level Quantitative Reasoning Seniors Peer Comparisons

In order to understand the survey questions that contribute to the statistically significant difference in the QR construct mean score for CSU seniors in 2019 compared to the mean score for seniors in the LLG

comparison group, the response distribution for survey items with large differences are presented in tables 24 and 25 below.

Table 24: Senior Response Distribution: Student responses to how often they used numerical information to examine a real-world problem or issue.

	Sample Size	Never	Sometimes	Often	Very often
CSU	1,935	16%	34%	32%	17%
Large Land Grant	15,341	17%	37%	30%	16%
Percentage Point (PP) Difference		-1.0	-3.0	2.0	1.0

Table 24 shows that 49% of seniors surveyed at CSU felt that they used numerical information to examine a real-world problem or issue often or very often compared to 46% of students surveyed in the LLG comparison group, a 3 PP difference.

Table 25: Senior Response Distribution: Student responses to how often they evaluated what others have concluded from numerical information.

	Sample Size	Never	Sometimes	Often	Very often
CSU	1,932	11%	35%	37%	17%
Large Land Grant	15,289	13%	38%	34%	15%
Percentage Point (PP) Difference		-2.0	-3.0	3.0	2.0

Table 25 shows that 54% of seniors surveyed at CSU felt that they evaluated what others have concluded from numerical information often or very often compared to 49% of seniors surveyed in the LLG comparison group, a 5 PP difference.

Learning with Peers

The Learning with Peers theme groups together engagement indicators that address how developing interpersonal and social competence and collaborating with others prepare students to deal with the complex problems they will face during and after college. Two engagement indicators are a part of this theme: Collaborative Learning and Discussions with Diverse Others.

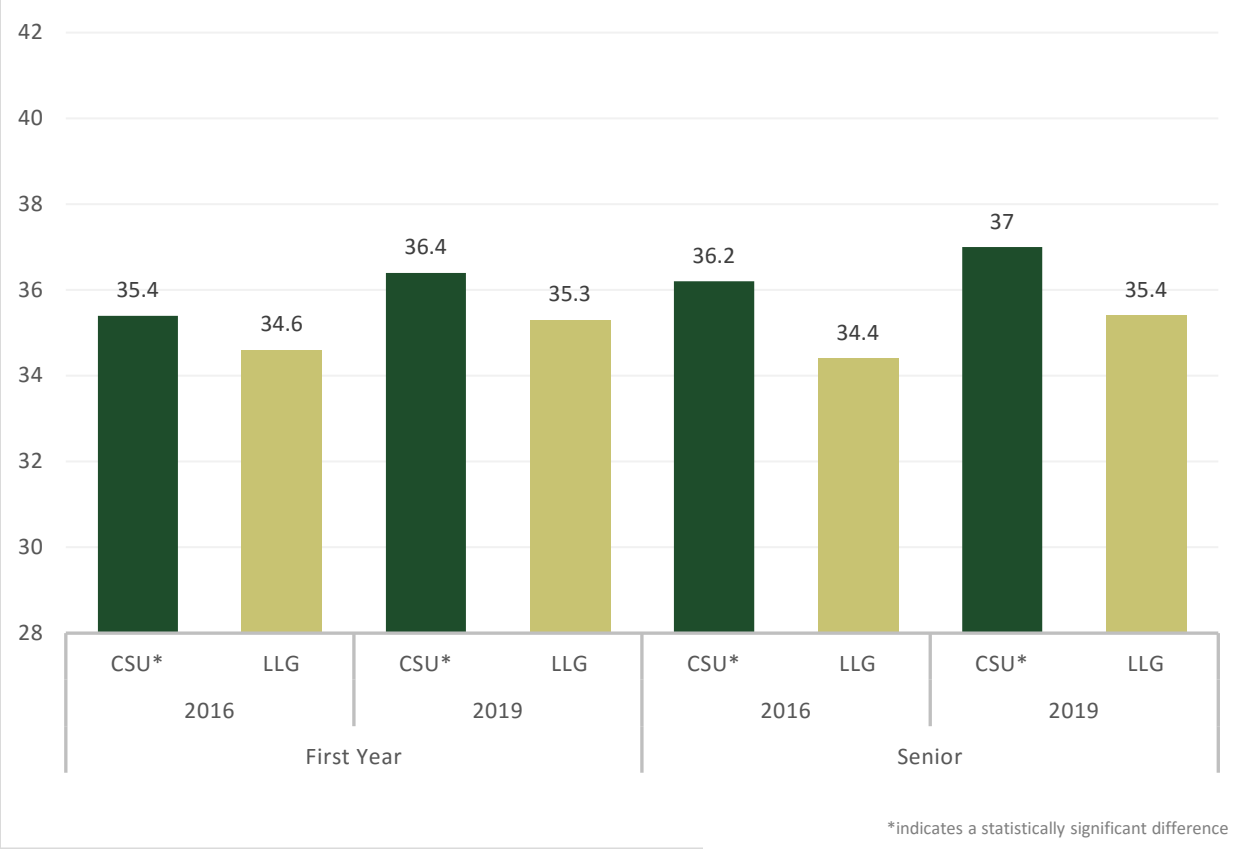
Collaborative Learning Engagement Indicator

The Collaborative Learning (CL) engagement indicator measures the extent to which students are collaborating with their peers to master difficult material or solve problems. Items address how often students are asking other students for help in understanding course material, explaining course material to one or more students, preparing for exams by discussing or working through course material with other students, and working with other students on course projects or assignments.

Collaborative Learning Benchmark Comparison

Figure 9 displays the mean score on the CL engagement indicator for CSU first-year and senior students compared to first-year and senior students in the LLG comparison group in both the 2016 and 2019 surveys.

Figure 8: Collaborative Learning Peer Comparison.



CSU first-year students have higher mean scores than first-year students in the LLG group in both 2016 and 2019. This difference is statistically significant in 2016 (.8) but with a small statistical effect size (Cohen's d=.12), and thus a small practical importance. Similarly, this difference is statistically significant in 2019 (1.1), with a small statistical effect size (Cohen's d=.08). CL mean scores increased for both CSU and LLG first-year students over this time period, by 1 engagement indicator point for the former, and by .7 for the latter.

CSU seniors have higher mean scores than seniors in the LLG group in both 2016 and 2019. The difference is statistically significant in both 2016 (1.8) and 2019 (1.6). Effect sizes are small in both 2016 (Cohen's d=.12) and 2019 (Cohen's d=.11). CL mean scores increased by .8 and 1 engagement indicator point respectively for both CSU and LLG seniors over this time period.

Collaborative Learning Survey Items

Both first-year and senior CSU students score higher on the CL indicator compared to first-year and seniors in the LLG comparison group in 2019. CSU first-years and seniors saw an increase in 2019 compared to 2016, as did first-years and seniors in the LLG comparison group. One of the largest increases is that of CSU first-year students, whose mean CL score increased by 1 point. This section explores the CL items that contributed to the statistically significant positive difference for first-year and senior CSU students compared to their LLG peers as well as the changes for first-year and senior CSU students in 2019 compared to 2016.

Item Level Collaborative Learning Change at CSU from 2016

Table 26 and 27 display the survey items that are used to create the CL construct and display the percent of first-year and senior students that responded "Very often" and "Often" to the survey questions. The tables highlight which survey items contributed to the 1-point increase in the CL mean score among first-year CSU students in 2019 compared to 2016 and to the .8 point increase in the CL mean score among senior CSU students in 2019 compared to 2016.

Table 26: Collaborative Learning Items Change from 2016 for First-Year Students.

Percentage of CSU first-years who responded that they "Very often" or "Often"...	2019	PP Change from 2016
Asked another student to help you understand course material	65	4
Explained course material to one or more students	67	2
Prepared for exams by discussing or working through course material with other students	62	0
Worked with other students on course projects or assignments	61	6

Table 26 shows that first-year students at CSU have positive gains in the response distribution on three of the four survey questions in 2019 compared to 2016. For example, 61% of CSU first-year students responded that they very often or often worked with other students on course projects or assignments in 2019 compared to 55% in 2016, which is a 6 PP change.

Table 27: Collaborative Learning Items Change from 2016 for Senior Students.

Percentage of CSU seniors who responded that they "Very often" or "Often"...	2019	PP Change from 2016
Asked another student to help you understand course material	58	5
Explained course material to one or more students	70	2
Prepared for exams by discussing or working through course material with other students	56	1
Worked with other students on course projects or assignments	72	3

Table 27 shows that senior students at CSU have positive gains in the response distribution in all four of the survey questions in 2019 compared to 2016. For example, 58% of CSU senior students responded that they very often or often asked another student to help them understand course material in 2019 compared to 53% in 2016, which is a 5 PP change.

Item Level Collaborative Learning First-Year Peer Comparisons

In order to understand the survey questions that contributed to the statistically significant difference in the CL construct for CSU first-years in 2019 compared to first-years in the LLG comparison group, the response distribution for survey items with large differences are presented in tables 28 and 29 below.

Table 28: First-Year Response Distribution: Student responses to how often they asked another student to help them understand course material.

	Sample Size	Never	Sometimes	Often	Very often
CSU	1,849	6%	29%	41%	24%
Large Land Grant	14,980	6%	32%	39%	22%
Percentage Point (PP) Difference		0.0	-3.0	2.0	2.0

Table 28 shows that 65% of first-year students surveyed at CSU feel that they asked another student to help them understand course material often or very often, compared to 61% of students surveyed in the LLG comparison group, a 4 PP difference.

Table 29: First-Year Response Distribution: Student responses to how often they prepared for exams by discussing or working through course material with other students.

	Sample Size	Never	Sometimes	Often	Very often
CSU	1,844	9%	29%	36%	26%
Large Land Grant	14,870	11%	31%	34%	24%
Percentage Point (PP) Difference		-2.0	-2.0	2.0	2.0

Table 29 shows that 62% of first-year students surveyed at CSU felt that they prepared for exams by discussing or working through course material with other students often or very often, compared to 58% of students surveyed in the LLG comparison group, a 4 PP difference.

Item Level Collaborative Learning Senior Peer Comparisons

In order to understand the survey questions that contributed to the statistically significant difference in the CL construct for CSU seniors in 2019 compared to seniors in the LLG comparison group, the response distribution for survey items with large differences are presented in tables 30, 31, and 32 below.

Table 30: Senior Response Distribution: Student responses to how often they asked another student to help them understand course material.

	Sample Size	Never	Sometimes	Often	Very often
CSU	2,068	8%	33%	36%	22%
Large Land Grant	17,264	10%	38%	33%	19%
Percentage Point (PP) Difference		-2.0	-5.0	3.0	3.0

Table 30 shows that 58% of CSU seniors felt that they asked another student to help them understand course material often or very often, compared to 52% of seniors surveyed in the LLG comparison group, a 6 PP difference.

Table 31: Senior Response Distribution: Student responses to how often they explained course material to one or more students.

	Sample Size	Never	Sometimes	Often	Very often
CSU	2,067	4%	26%	42%	28%
Large Land Grant	17,224	4%	31%	41%	25%
Percentage Point (PP) Difference		0.0	-5.0	1.0	3.0

Table 31 shows that 70% of CSU seniors felt that they explained course material to one or more students often or very often, compared to 66% of seniors surveyed in the LLG comparison group, a 4 PP difference.

Table 32: Senior Response Distribution: Student responses to how often they prepared for exams by discussing or working through course material with other students.

	Sample Size	Never	Sometimes	Often	Very often
CSU	2,065	12%	32%	31%	25%
Large Land Grant	17,188	14%	33%	30%	23%
Percentage Point (PP) Difference		-2.0	-1.0	1.0	2.0

Table 32 shows that 56% of seniors surveyed at CSU felt that they prepare for exams by discussing or working through course material with other students often or very often, compared to 53% of seniors surveyed in the LLG comparison group, a 3 PP difference.

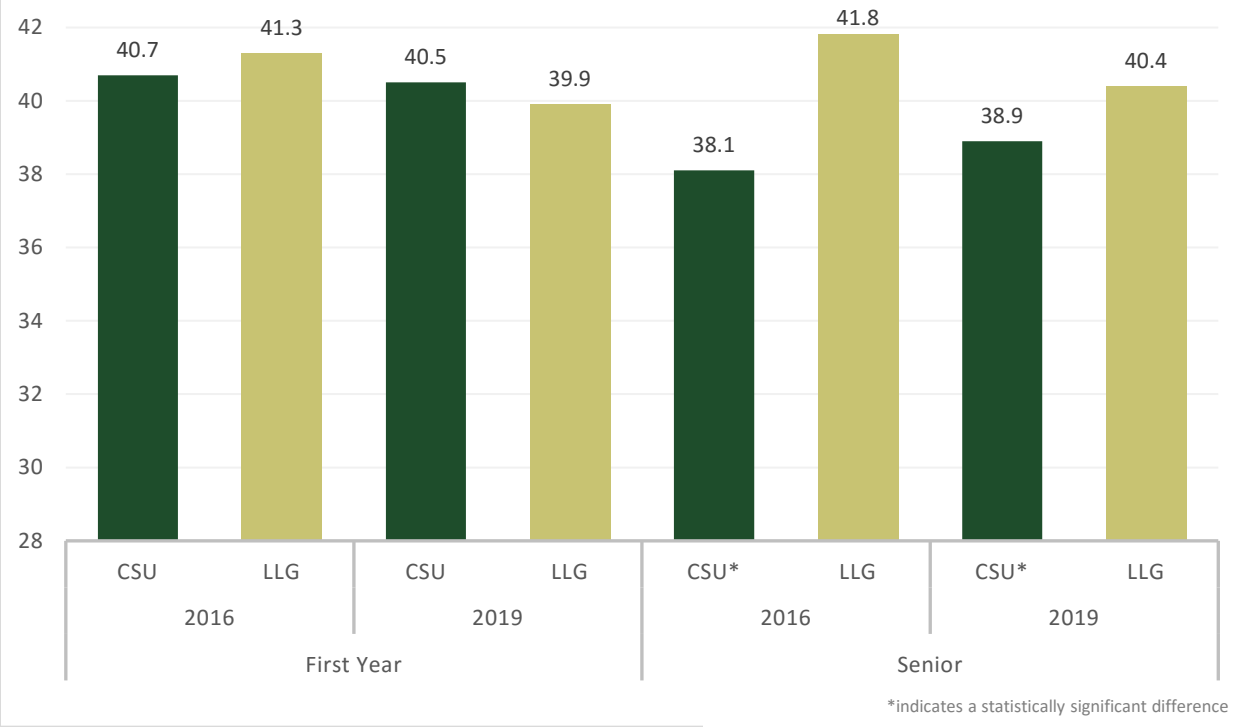
Discussions with Diverse Others

The Discussions with Diverse Others (DD) engagement indicator measures the extent to which students are interacting and learning from others with different backgrounds and life experiences. Items ask students how often they have had discussions with people from a race or ethnicity, economic background, religious beliefs, and political views different than their own.

Discussions with Diverse Others Benchmark Comparison

Figure 10 displays the mean score on the DD engagement indicator for CSU first-year and senior students compared to first-year and senior students in the LLG comparison group in both the 2016 and 2019 surveys.

Figure 9: Discussions with Diverse Others Peer Comparison.



CSU first-year students have lower mean scores than first-year students in the LLG comparison group in 2016, and higher mean scores in 2019. The difference (.6) is not statistically significant in 2016 or in 2019 (.6). The average score for this construct among first-year students at CSU decreased by .2 between 2016 and 2019, while it decreased by 1.4 for first-year students in the LLG comparison group.

CSU seniors have lower mean scores than students in the LLG group by 3.7 points in 2016 and by 1.5 points in 2019. This difference is statistically significant with a small to medium effect size in 2016 (Cohen's d=-.24) and statistically significant with a small effect size in 2019 (Cohen's d=-.10). For both years, these relatively small effect sizes indicate that the practical difference of these observed differences is small.

Discussions with Diverse Others Survey Items

The DD engagement indicator shows a decrease for first-year CSU students in 2019 compared to 2016 and an increase for senior CSU students. Additionally, this engagement indicator shows a statistically significant negative difference in the mean score for CSU seniors compared to seniors in the LLG comparison group in 2019. This section explores the individual survey item responses that contribute to these differences.

Item Level Discussions with Diverse Others Change at CSU from 2016

Table 33 displays the survey items that are used to create the DD construct and displays the percent of senior students that responded "Often" or "Very often" to each item. The table highlights which survey items contributed to the .8 increase in the DD indicator among senior CSU students in 2019 compared to 2016.

Table 33: Discussions with Diverse Others Items Change from 2016 for CSU Seniors.

Percentage of CSU seniors who responded that they have had discussions with people from the following groups "Very often" or "Often"...	2019	PP Change from 2016
People of a race or ethnicity other than your own	64	7
People from an economic background other than your own	72	4
People with religious beliefs other than your own	67	0
People with political views other than your own	66	-2

Table 33 shows that seniors at CSU have positive gains in the response distribution on two of the four survey questions in 2019 compared to 2016. For instance, 64% of CSU seniors responded that they have discussions with people of a race or ethnicity other than their own often or very often compared to 57% in 2016, which is a 7 PP change.

Seniors at CSU have negative changes in the response distribution on one of the four items in 2019 compared to 2016, as 66% of seniors responded that they have discussions with people with political views other than their own often or very often compared to 68% in 2016, a negative 2 PP change.

Item Level Discussions with Diverse Others Peer Comparisons

In order to understand the survey questions that contributed to the statistically significant negative difference in the DD construct for CSU seniors in 2019 compared to seniors in the LLG comparison group, the response distribution for survey items with large differences are presented in tables 34 and 35 below.

Table 34: Senior Response Distribution: Student responses to how often they had discussions with people of a race or ethnicity other than your own.

	Sample Size	Never	Sometimes	Often	Very often
CSU	1,929	5%	31%	32%	32%
Large Land Grant	15,239	4%	26%	32%	38%
Percentage Point (PP) Difference		1.0	5.0	0.0	-6.0

Table 34 shows that 64% of seniors surveyed at CSU felt that they had discussions with people of a race or ethnicity other than their own often or very often compared to 70% of students surveyed at LLG universities, a negative 6 PP difference.

Table 35: Senior Response Distribution: Student responses to how often they had discussions with people with political views other than their own.

	Sample Size	Never	Sometimes	Often	Very often
CSU	1,925	5%	29%	35%	31%
Large Land Grant	15,213	5%	27%	34%	34%
Percentage Point (PP) Difference		0.0	2.0	1.0	-3.0

Table 35 shows that 66% of seniors surveyed at CSU felt that they had discussions with people with political views other than their own often or very often, compared to 68% of seniors surveyed at LLG universities, a negative 2 PP difference.

Experiences with Faculty

The Experiences with Faculty theme groups together engagement indicators that address the important role that faculty members play in student learning through interactions inside and outside of the classroom and through effective teaching practices. Two engagement indicators are a part of this theme: Student-Faculty Interaction and Effective Teaching Practices.

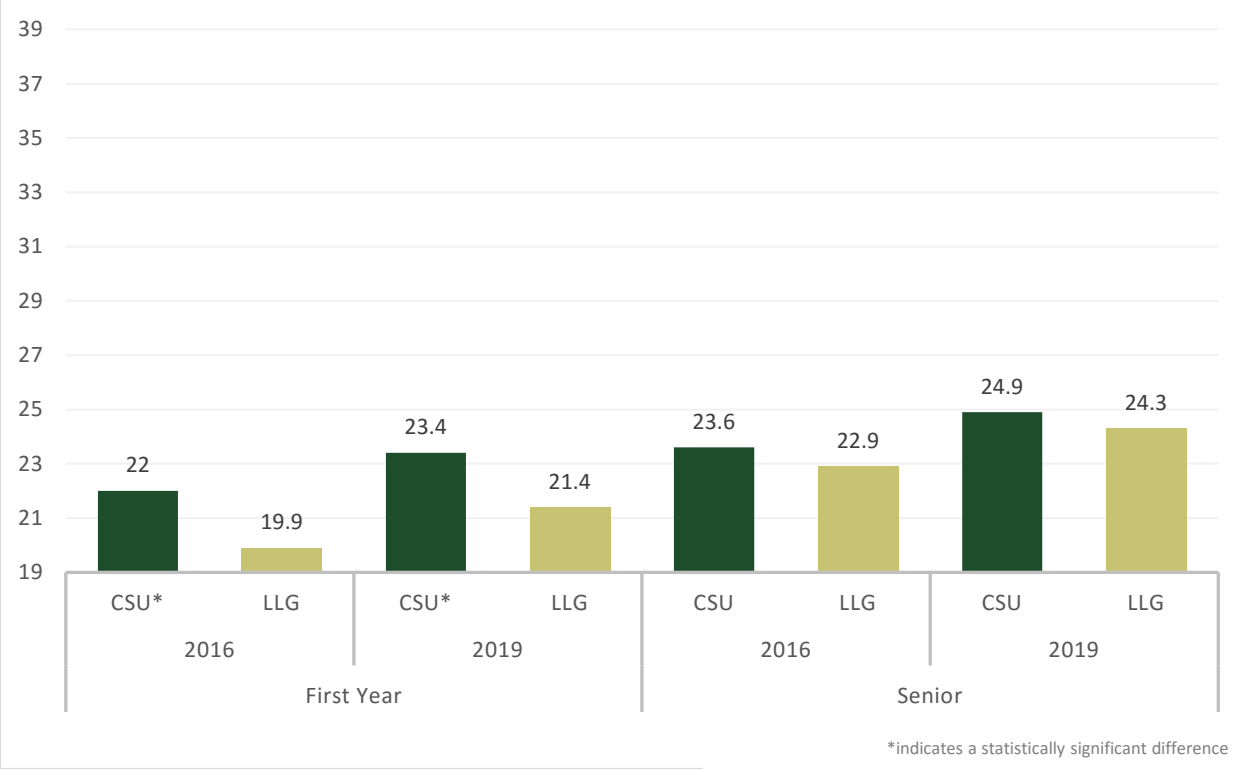
Student-Faculty Interaction Indicator

The Student-Faculty Interaction (SF) indicator measures the extent to which interactions with faculty inside and outside of the classroom are influencing student learning and growth. Items address how often students talk about their career plans with faculty members, work with a faculty member on activities other than coursework, discuss course topics, ideas, or concepts with a faculty member outside of class, and discuss their academic performance with a faculty member.

Student-Faculty Interaction Benchmark Comparison

Figure 11 displays the mean score on the SF engagement indicator for CSU first-year and senior students compared to first-year and senior students in the LLG comparison group in both the 2016 and 2019 surveys.

Figure 10: Student-Faculty Interaction Peer Comparison.



CSU first-year students have higher mean scores than first-year students in the LLG group in both 2016 and 2019. The difference is statistically significant in 2016 (2.1) with a small effect size (Cohen's d=.14) and statistically significant in 2019 (2) with a small effect size (Cohen's d =.12). SF mean scores increased for first-year students at CSU by 1.4 and for first-year students in the LLG comparison group by 1.5 between 2016 and 2019.

CSU seniors have higher mean scores than seniors in the LLG group by .7 of an indicator point in 2016 and by .6 of an indicator point in 2019. Neither of these differences is statistically significant. The mean score for CSU seniors increased by 1.3 between 2016 and 2019 compared to the increase of 1.4 for seniors in the LLG comparison group.

Student-Faculty Interaction Survey Items

The SL engagement indicator shows an increase in the mean score for CSU first-year and senior students in 2019 compared to 2016. Additionally, it shows a statistically significant difference in the mean score for CSU first-year students compared to first-year students in the LLG comparison group in 2019. This section explores the individual survey item responses that contribute to these differences.

Item Level Student-Faculty Interaction Change at CSU from 2016

Table 36 displays the survey items that are used to create the SF construct and displays the percent of first-year students that responded "Very often" or "Often" to each item. The table highlights which survey items contributed to the 1.4 increase in the SF indicator among first-year CSU students in 2019 compared to 2016.

Table 36: Student-Faculty Interaction Items Change from 2016 for CSU First-Year Students.

Percentage of CSU first-years who responded that they "Very often" or "Often"...	2019	PP Change from 2016
Talked about career plans with a faculty member	43	5
Worked with a faculty member on activities other than coursework (committees, student groups, etc.)	24	2
Discussed course topics, ideas, or concepts with a faculty member outside of class	29	2
Discussed your academic performance with a faculty member	33	4

First-year students at CSU have positive gains in the response distribution on all four survey questions in 2019 compared to 2016. For example, 43% of CSU first-year students responded in the positive about talking about their career plans with a faculty member in 2019, compared to 38% in 2016, which is a 5 PP change.

Table 37 displays the survey items that are used to create the SF construct and displays the percent of seniors that responded “Very often” or “Often” to each item. The table highlights which survey items contributed to the 1.3 increase in the SF indicator among CSU seniors in 2019 compared to 2016.

Table 37: Student-Faculty Interaction Items Change from 2016 for CSU Seniors.

Percentage of CSU seniors who responded that they have had discussions with people from the following groups "Very often" or "Often"...	2019	PP Change from 2016
Talked about career plans with a faculty member	46	3
Worked with a faculty member on activities other than coursework (committees, student groups, etc.)	32	4
Discussed course topics, ideas, or concepts with a faculty member outside of class	34	2
Discussed your academic performance with a faculty member	30	3

Seniors at CSU have positive gains in the response distribution on all four survey questions in 2019 compared to 2016. For example, 46% of CSU first-year students responded in the positive about talking about their career plans with a faculty member in 2019, compared to 43% in 2016, which is a 3 PP change.

Item Level Student-Faculty Interaction First-Year Peer Comparisons

In order to understand the survey questions that contributed to the statistically significant difference in the SF construct for CSU first-years in 2019 compared to first-years in the LLG comparison group, the response distribution for survey items with large differences are presented in tables 38 through 41 below.

Table 38: First-Year Response Distribution: Student responses to how often they talked about career plans with a faculty member.

	Sample Size	Never	Sometimes	Often	Very often
CSU	1,760	14%	43%	28%	15%
Large Land Grant	1,906	17%	44%	26%	13%
Percentage Point (PP) Difference		-3.0	-1.0	2.0	2.0

Table 38 shows that 43% of first-year students surveyed at CSU felt that they talked about career plans with a faculty member often or very often, compared to 39% of students surveyed in the LLG comparison group, a 4 PP difference.

Table 39: First-Year Response Distribution: Student responses to how often they worked with a faculty member on activities other than coursework (committees, student groups, etc.).

	Sample Size	Never	Sometimes	Often	Very often
CSU	1,757	41%	34%	17%	7%
Large Land Grant	13,652	45%	33%	15%	6%
Percentage Point (PP) Difference		-4.0	1.0	2.0	1.0

Table 39 shows that 24% of first-year students surveyed at CSU felt that they worked with a faculty member on activities other than coursework often or very often, compared to 21% of students surveyed in the LLG comparison group, a 3 PP difference.

Table 40: First-Year Response Distribution: Student responses to how often they discussed course topics, ideas, or concepts with a faculty member outside of class.

	Sample Size	Never	Sometimes	Often	Very often
CSU	1,746	24%	47%	21%	8%
Large Land Grant	13,541	31%	45%	17%	7%
Percentage Point (PP) Difference		-7.0	2.0	4.0	1.0

Table 40 shows that 29% of first-year students surveyed at CSU felt that they discussed course topics, ideas, or concepts with a faculty member outside of class often or very often, compared to 24% of students surveyed in the LLG comparison group, a 5 PP difference.

Table 41: First-Year Response Distribution: Student responses to how often they discussed their academic performance with a faculty member.

	Sample Size	Never	Sometimes	Often	Very often
CSU	1,741	21%	46%	24%	9%
Large Land Grant	13,511	25%	48%	20%	7%
Percentage Point (PP) Difference		-4.0	-2.0	4.0	2.0

Table 41 shows that 33% of first-year students surveyed at CSU felt that they discussed their academic performance with a faculty member often or very often, compared to 27% of students surveyed in the LLG comparison group, a 6 PP difference.

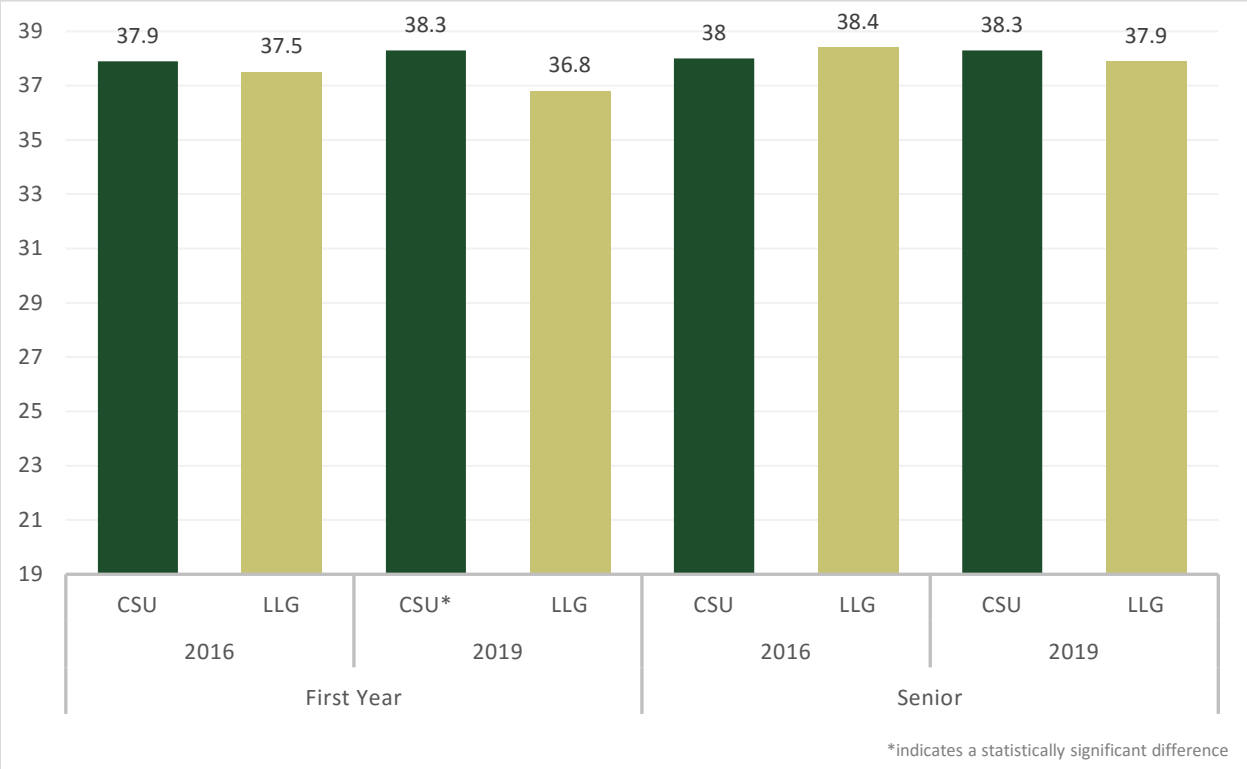
Effective Teaching Practices

The Effective Teaching Practices (ET) engagement indicator measures to what extent faculty members are using effective teaching practices that promote student learning and comprehension such as organized instruction, clear explanations, illustrative examples, and effective feedback on student work. Items address the extent to which instructors have clearly explained course goals and requirements, taught course sessions in an organized way, used examples or illustrations to explain difficult points, provided feedback on a draft or work in progress, and provided prompt and detailed feedback on tests or completed assignments.

Effective Teaching Practices Benchmark Comparisons

Figure 12 displays the mean score on the ET engagement indicator for CSU first-year and senior students compared to first-year and senior students in the LLG comparison group in both the 2016 and 2019 surveys.

Figure 11: Effective Teaching Practices Peer Comparison.



CSU first-year students have higher mean scores than first-year students in the LLG group in 2016 and 2019. The difference is very small and not statistically significant in 2016 (.4), but larger and statistically significant in 2019 (1.5). It should be noted that this larger difference still has a statistical effect that is relatively small (Cohen's d =.12), indicating that its practical importance is relatively small. The average score for this construct among first-year students at CSU increased slightly between 2016 and 2019 (.4) but decreased for first-year students in the LLG comparison group by .7 of an indicator point.

CSU seniors have lower mean scores than students in the LLG group by .4 of an engagement indicator point in 2016 and higher mean scores than students in the LLG group by .4 of an engagement indicator point in 2019. This difference is not statistically different in either year. The ET construct average

increased by .3 for CSU seniors between 2016 and 2019 and decreased by .5 for seniors in the LLG comparison group during that time period.

Effective Teaching Practices Survey Items

The ET engagement indicator shows a statistically significant difference in the mean score for CSU first-year students compared to first-year students in the LLG comparison group in 2019. This section explores the individual survey item responses that contribute to this difference.

Item Level Effective Teaching Practices Peer Comparisons

In order to understand the survey questions that contributed to the statistically significant difference in the ET construct for CSU first year students in 2019 compared to first-year students in the LLG comparison group, the response distribution for survey items with large differences are presented in tables 42 through 46 below.

Table 42: First-Year Response Distribution: Student responses to the extent to which their instructors clearly explained course goals and requirements.

	Sample Size	Very little	Some	Quite a bit	Very much
CSU	1,711	1%	19%	50%	30%
Large Land Grant	13,096	2%	23%	48%	27%
Percentage Point (PP) Difference		-1.0	-4.0	2.0	3.0

Table 42 shows that 80% of first-year students surveyed at CSU felt that their instructors clearly explained course goals and requirements quite a bit or very much, compared to 75% of students surveyed at LLG universities, a 5 PP difference.

Table 43: First-Year Response Distribution: Student responses to the extent to which their instructors taught course sessions in an organized way.

	Sample Size	Very little	Some	Quite a bit	Very much
CSU	1,713	3%	21%	50%	26%
Large Land Grant	13,068	3%	23%	48%	25%
Percentage Point (PP) Difference		0.0	-2.0	2.0	1.0

Table 43 shows that 76% of first-year students surveyed at CSU felt that their instructors taught course sessions in an organized way quite a bit or very much, compared to 73% of students surveyed at LLG universities, a 3 PP difference.

Table 44: First-Year Response Distribution: Student responses to the extent to which their instructors used examples or illustrations to explain difficult points.

	Sample Size	Very little	Some	Quite a bit	Very much
CSU	1,708	2%	20%	48%	30%
Large Land Grant	13,045	3%	23%	46%	29%
Percentage Point (PP) Difference		-1.0	-3.0	2.0	1.0

Table 44 shows that 78% of first-year students surveyed at CSU felt that their instructors used examples or illustrations to explain difficult points quite a bit or very much, compared to 75% of students surveyed at LLG universities, a 3 PP difference.

Table 45: First-Year Response Distribution: Student responses to the extent to which their instructors provided feedback on a draft or work in progress.

	Sample Size	Very little	Some	Quite a bit	Very much
CSU	1,703	8%	32%	39%	21%
Large Land Grant	13,020	10%	34%	36%	20%
Percentage Point (PP) Difference		-2.0	-2.0	3.0	1.0

Table 45 shows that 60% of first-year students surveyed at CSU felt that their instructors provided feedback on a draft or work in progress quite a bit or very much, compared to 56% of students surveyed at LLG universities, a 4 PP difference.

Table 46: First-Year Response Distribution: Student responses to the extent to which their instructors provided prompt and detailed feedback on tests or completed assignments.

	Sample Size	Very little	Some	Quite a bit	Very much
CSU	1,701	7%	36%	39%	18%
Large Land Grant	12,987	11%	37%	36%	16%
Percentage Point (PP) Difference		-4.0	-1.0	3.0	2.0

Table 46 shows that 57% of first-year students surveyed at CSU felt that their instructors provided prompt and detailed feedback on tests or completed assignments quite a bit or very much, compared to 52% of students surveyed at LLG universities, a 5 PP difference.

Campus Environment

The Campus Environment theme groups together engagement indicators that address supportive settings and the role they play in cultivating positive relationships among students, faculty, and staff as well as in student satisfaction. Two engagement indicators are a part of this theme: Quality of Interactions and Supportive Environment.

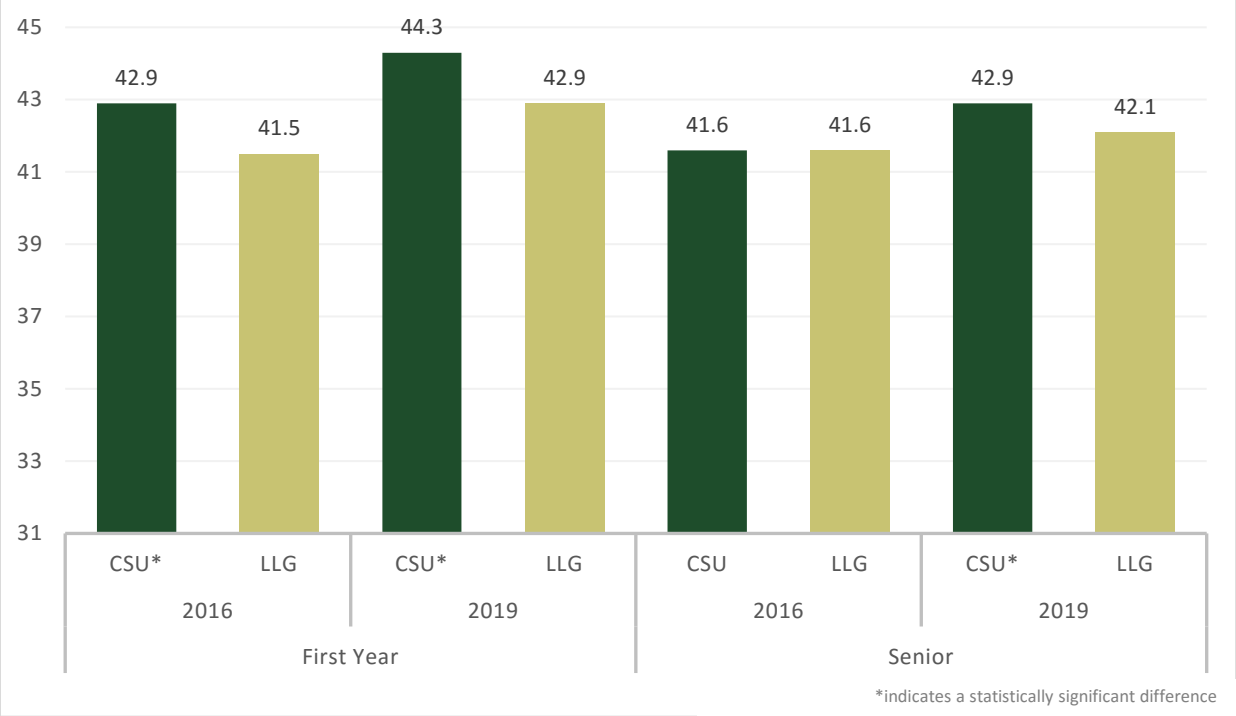
Quality of Interactions

The Quality of Interactions (QI) indicator measures the quality of interactions between students and other people at their institution including students, academic advisors, faculty, student services staff, and other administrative staff and offices.

Quality of Interactions Benchmark Comparison

Figure 13 displays the mean score on the QI engagement indicator for CSU first-years and seniors compared to first-years and seniors in the LLG comparison group in both the 2016 and 2019 surveys.

Figure 12: Quality of Interactions Peer Comparison.



CSU first-year students have a statistically significant higher mean score than first-years in the LLG group in 2016 by 1.4, although with a small statistical effect size (Cohen's d= .12) and thus a small practical importance. CSU first-years also have a statistically significant higher mean score than first-years in the LLG group in 2019 by 1.4, with a similarly small statistical effect size (Cohen's d= .13). QI mean scores increased for both CSU and LLG first-year students between 2016 and 2019 by 1.4 of an engagement indicator point.

CSU seniors have the same mean score as seniors in the LLG group in 2016, and a statistically significant higher mean score in 2019 compared to the LLG reference group by .8 of an indicator point. The significantly significant difference in 2019 has a very small practical effect (Cohen's d=.07).

Quality of Interactions Survey Items

Both first-year and senior CSU students show an increase in the QI engagement indicator in 2019 compared to 2016. Additionally, both first-years and seniors surveyed at CSU score higher on the QI indicator compared to first-year and seniors in the LLG comparison group in 2019. This section explores the individual survey item responses that contribute to these differences.

Item Level Quality of Interactions Change at CSU from 2016

Table 47 and 48 display the survey items that are used to create the QI construct and the percent of students that responded in the positive (5-7 on a scale of 1-7 from poor to excellent) to each item. The tables highlight which survey items contributed to the increase in the QI indicator among CSU first-years and seniors between 2016 and 2019.

Table 47: Quality of Interactions Items Change from 2016 for CSU First-Years.

Percentage of CSU first-years who responded in the positive about the quality of their interactions with the following people at their institution…	2019	PP Change from 2016
Students	82	0
Academic advisors	79	5
Faculty	80	7
Student services staff (career services, student activities, housing, etc.)	71	4
Other administrative staff and offices (registrar, financial aid, etc.)	68	8

Table 47 shows that first-year students at CSU have positive gains in four of the five survey questions in 2019 compared to 2016. For instance, 68% of CSU first-years responded in the positive about the quality of their interactions with administrative staff and offices compared to 60% in 2016, which is an 8 PP change.

Table 48: Quality of Interactions Items Change from 2016 for CSU Seniors.

Percentage of CSU seniors who responded in the positive about the quality of their interactions with the following people at their institution…	2019	PP Change from 2016
Students	83	-1
Academic advisors	73	6
Faculty	79	-1
Student services staff (career services, student activities, housing, etc.)	60	5
Other administrative staff and offices (registrar, financial aid, etc.)	59	4

Table 48 shows that seniors at CSU have positive gains in three out of the five survey items in 2019 compared to 2016. For example, 73% of CSU seniors responded in the positive about the quality of their interactions with academic advisors compared to 67% in 2016, a 6 PP change.

Item Level Quality of Interactions First-Year Peer Comparisons

In order to understand the survey questions that contribute to the statistically significant difference in the QI construct for CSU first-year students in 2019 compared to first-year students in the LLG comparison group, the response distribution for survey items with large differences are presented in tables 49 through 51 below.

Table 49: First-Year Response Distribution: Student responses to the quality of their interactions with academic advisors at their institution.

	Sample Size	1 (Poor)	2	3	4	5	6	7 (Excellent)	NA
CSU	1,637	2%	3%	5%	11%	22%	23%	34%	1%
Large Land Grant	12,317	2%	3%	6%	13%	20%	22%	32%	1%
Percentage Point (PP) Difference		0.0	0.0	-1.0	-2.0	2.0	1.0	2.0	0.0

Table 49 shows that 79% of first-year students surveyed at CSU responded in the positive about the quality of their interactions with academic advisors at their institution, compared to 74% of first-year students surveyed in the LLG comparison group, a 3 PP difference.

Table 50: First-Year Response Distribution: Student responses to the quality of their interactions with faculty at their institution.

	Sample Size	1 (Poor)	2	3	4	5	6	7 (Excellent)	NA
CSU	1,637	1%	1%	5%	12%	26%	31%	23%	1%
Large Land Grant	12,310	1%	2%	6%	14%	29%	27%	19%	1%
Percentage Point (PP) Difference		0.0	-1.0	-1.0	-2.0	-3.0	4.0	4.0	0.0

Table 50 shows that 80% of first-year students surveyed at CSU responded in the positive about the quality of their interactions with faculty at their institution, compared to 75% of first-year students surveyed in the LLG comparison group, a 5 PP difference.

Table 51: First-Year Response Distribution: Student responses to the quality of their interactions with student services staff at their institution.

	Sample Size	1 (Poor)	2	3	4	5	6	7 (Excellent)	NA
CSU	1,637	2%	3%	5%	13%	24%	25%	22%	6%
Large Land Grant	12,309	3%	3%	6%	14%	22%	22%	21%	7%
Percentage Point (PP) Difference		-1.0	0.0	-1.0	-1.0	2.0	3.0	1.0	-1.0

Table 51 shows that 71% of first-year students surveyed at CSU responded in the positive about the quality of their interactions with student services staff at their institution, compared to 65% of first-year students surveyed in the LLG comparison group, a 6 PP difference.

Table 52: First-Year Response Distribution: Student responses to the quality of their interactions with other administrative staff and offices at their institution.

	Sample Size	1 (Poor)	2	3	4	5	6	7 (Excellent)	NA
CSU	1,634	2%	2%	5%	14%	24%	25%	19%	9%
Large Land Grant	12,314	3%	4%	7%	16%	23%	20%	18%	10%
Percentage Point (PP) Difference		-1.0	-2.0	-2.0	-2.0	1.0	5.0	1.0	-1.0

Table 52 shows that 68% of first-year students surveyed at CSU responded in the positive about the quality of their interactions with other administrative staff and offices at their institution compared to 61% of first-year students surveyed in the LLG comparison group, a 7 PP difference.

Item Level Quality of Interactions Senior Peer Comparisons

In order to understand the survey questions that contributed to the statistically significant difference in the QI construct for CSU seniors in 2019 compared to seniors in the LLG comparison group, the response distribution for survey items with large differences are presented in tables 53 through 55.

Table 53: Senior Response Distribution: Student responses to the quality of their interactions with academic advisors at their institution.

	Sample Size	1 (Poor)	2	3	4	5	6	7 (Excellent)	NA
CSU	1,910	4%	4%	7%	11%	18%	22%	32%	1%
Large Land Grant	14,951	4%	5%	8%	13%	19%	20%	30%	0%
Percentage Point (PP) Difference		0.0	-1.0	-1.0	-2.0	-1.0	2.0	2.0	1.0

Table 53 shows that 72% of seniors surveyed at CSU responded in the positive about the quality of their interactions with academic advisors at their institution, compared to 69% of seniors surveyed in the LLG comparison group, a 3 PP difference.

Table 54: Senior Response Distribution: Student responses to the quality of their interactions with faculty at their institution.

	Sample Size	1 (Poor)	2	3	4	5	6	7 (Excellent)	NA
CSU	1,911	1%	1%	5%	13%	26%	30%	23%	1%
Large Land Grant	17,947	1%	2%	5%	13%	27%	29%	21%	0%
Percentage Point (PP) Difference		0.0	-1.0	0.0	0.0	-1.0	1.0	2.0	1.0

Table 54 shows that 79% of seniors surveyed at CSU responded in the positive about the quality of their interactions with faculty at their institution, compared to 77% of seniors surveyed in the LLG comparison group, a 2 PP difference.

Table 55: Senior Response Distribution: Student responses to the quality of their interactions with student services staff at their institution.

	Sample Size	1 (Poor)	2	3	4	5	6	7 (Excellent)	NA
CSU	1,908	3%	3%	6%	14%	22%	20%	18%	14%
Large Land Grant	14,936	4%	4%	7%	15%	21%	19%	17%	14%
Percentage Point (PP) Difference		-1.0	-1.0	-1.0	-1.0	1.0	1.0	1.0	0.0

Table 55 shows that 60% of seniors surveyed at CSU responded in the positive about the quality of their interactions with student services staff at their institution, compared to 57% of seniors surveyed in the LLG comparison group, a 3 PP difference.

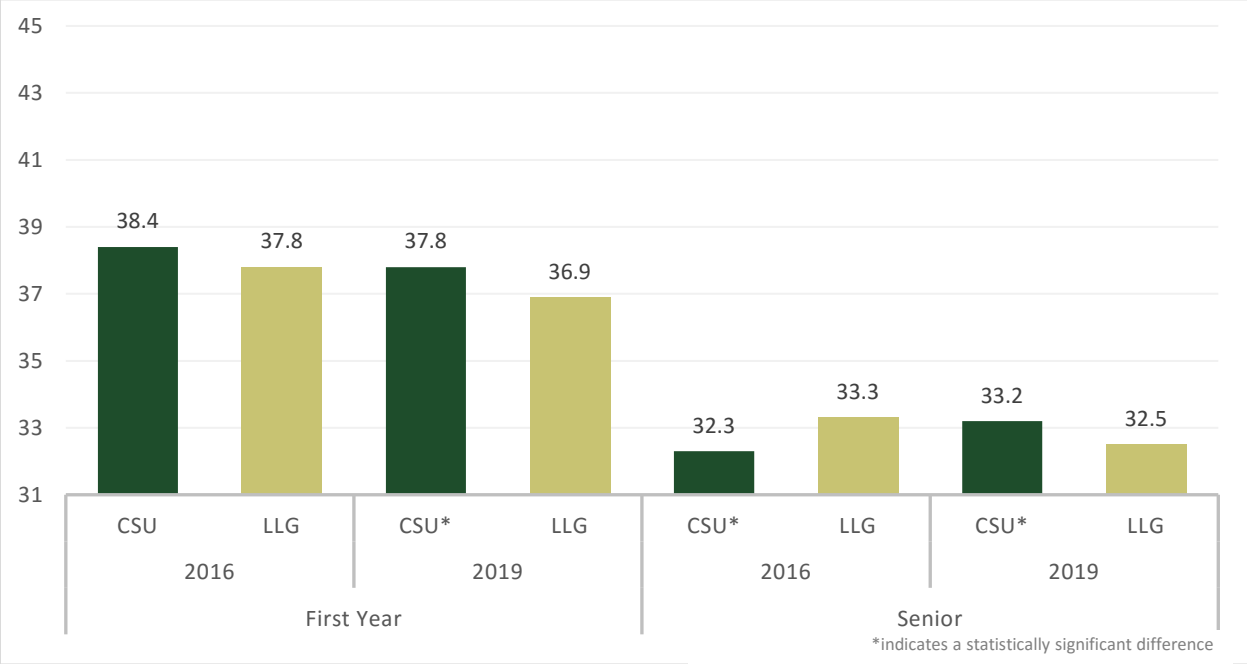
Supportive Environment

The Supportive Environment (SE) indicator measures students' perceptions of their institution's focus on services and activities that support their learning and development. Among others, items include the extent to which the institution emphasizes providing support to help students to succeed academically, using learning support services, providing opportunities for students to be involved socially, helping students manage their non-academic responsibilities, attending campus activities and events, and attending events that address important social, economic, or political issues.

Supportive Environment Benchmark Comparison

Figure 14 displays the mean score on the SE engagement indicator for CSU first-year and senior students compared to first-year and senior students in the LLG comparison group in both 2016 and 2019.

Figure 13: Supportive Environment Peer Comparison.



CSU first-year students have higher mean scores than first-year students in the LLG group in both 2016 (.6) and 2019 (.9). This difference is only statistically significant in 2019 with a small effect size (Cohen's d= .07), indicating it is of small practical importance. SE mean scores decreased between 2016 and 2019 for both CSU and LLG first-year students, by .6 and .9 of an engagement indicator point, respectively.

CSU seniors have lower mean scores than seniors in the LLG group by 1 engagement indicator point in 2016 and higher mean scores than seniors in the LLG group by .7 of an engagement indicator point in 2019. This difference is statistically significant in both years, with small effect sizes in both 2016 (Cohen's d= -.08) and 2019 (Cohen's d= .05), indicating a small practical importance. While the mean SE score increased for CSU seniors between 2016 and 2019 by .9, it decreased for seniors in the LLG comparison group by .8.

Supportive Environment Survey Items

The SE engagement indicator shows a decrease in the mean score for CSU first-years and an increase for CSU seniors between 2016 and 2019. Additionally, in 2019 it shows a statistically significant difference in the mean score for CSU first-year students compared to first-year students in the LLG comparison group, and CSU seniors compared to seniors in the LLG comparison group. This section explores the individual survey item responses that contribute to these differences.

Item Level Supportive Environment Change at CSU from 2016

Tables 56 and 57 display the survey items that are used to create the SE construct and the percent of students that responded “Very much” or “Quite a bit” to each item. The tables highlight which survey items contributed to the decrease in the QI indicator among CSU first-years and the increase in the QI indicator among CSU seniors between 2016 and 2019.

Table 56: Supportive Environment Items Change from 2016 for CSU First-Years.

Percentage of CSU first-years who responded that their institution emphasizes the following "Very much" or "Quite a bit"...	2019	PP Change from 2016
Providing support to help students succeed academically	79	-2
Using learning support services (tutoring services, writing center, etc.)	79	-1
Encouraging contact among students from different backgrounds (social, racial/ethnic, religious, etc.)	65	2
Providing opportunities to be involved socially	74	-3
Providing support for your overall well-being (recreation, health care, counseling, etc.)	77	-1
Helping you manage your non-academic responsibilities (work, family, etc.)	46	-4
Attending campus activities and events (performing arts, athletic events, etc.)	66	-4
Attending events that address important social, economic, or political issues	51	-6

Table 56 shows that first-year students at CSU have negative gains in the response distribution on seven of the eight survey questions in 2019 compared to 2016. For instance, 51% of CSU first-year students responded that their institution emphasizes attending events that address important social, economic, or political issues, compared to 57% in 2016, a negative 6 PP change.

Table 57: Supportive Environment Items Change from 2016 for CSU Seniors.

Percentage of CSU seniors who responded that their institution emphasizes the following "Very much" or "Quite a bit"...	2019	PP Change from 2016
Providing support to help students succeed academically	74	0
Using learning support services (tutoring services, writing center, etc.)	69	2
Encouraging contact among students from different backgrounds (social, racial/ethnic, religious, etc.)	52	9
Providing opportunities to be involved socially	66	1
Providing support for your overall well-being (recreation, health care, counseling, etc.)	70	1
Helping you manage your non-academic responsibilities (work, family, etc.)	34	5
Attending campus activities and events (performing arts, athletic events, etc.)	52	-2
Attending events that address important social, economic, or political issues	41	1

Table 57 shows that seniors at CSU have positive gains in the response distribution on six of the eight survey questions in 2019 compared to 2016. For instance, 52% of CSU first-year students responded that their institution emphasizes encouraging contact among students from different backgrounds, compared to 43% in 2016, a 9 PP change.

Item Level Supportive Environment First-Year Peer Comparisons

In order to understand the survey questions that contributed to the statistically significant difference in the SE construct for CSU first-years in 2019 compared to first-years in the LLG comparison group, the response distribution for survey items with large differences are presented in tables 58 through 61 below.

Table 58: First-Year Response Distribution: Student responses to how much their institution emphasizes encouraging contact among students from different backgrounds.

	Sample Size	Very little	Some	Quite a bit	Very much
CSU	1,625	7%	28%	37%	28%
Large Land Grant	12,214	11%	30%	35%	24%
Percentage Point (PP) Difference		-4.0	-2.0	2.0	4.0

Table 58 shows that 65% of first-year students surveyed at CSU feel that their institution emphasizes encouraging contact among students from different background quite a bit or very much, compared to 59% of students surveyed in the LLG comparison group, a 6 PP difference.

Table 59: First-Year Response Distribution: Student responses to how much their institution emphasizes helping students manage their non-academic responsibilities.

	Sample Size	Very little	Some	Quite a bit	Very much
CSU	1,616	15%	39%	29%	17%
Large Land Grant	12,169	21%	39%	27%	13%
Percentage Point (PP) Difference		-6.0	0.0	2.0	4.0

Table 59 shows that 46% of first-year students surveyed at CSU feel that their institution emphasizes helping students manage their non-academic responsibilities quite a bit or very much, compared to 40% of students surveyed in the LLG comparison group, a 6 PP difference.

Table 60: First-Year Response Distribution: Student responses to how much their institution emphasizes attending activities and events.

	Sample Size	Very little	Some	Quite a bit	Very much
CSU	1,618	5%	29%	42%	24%
Large Land Grant	12,180	5%	24%	41%	30%
Percentage Point (PP) Difference		0.0	5.0	1.0	-6.0

Table 60 shows that 66% of first-year students surveyed at CSU feel that their institution emphasizes attending activities and events quite a bit or very much, compared to 71% of students surveyed in the LLG comparison group, a negative 5 PP difference.

Table 61: First-Year Response Distribution: Student responses to how much their institution emphasizes attending events that address important social, economic, or political issues.

	Sample Size	Very little	Some	Quite a bit	Very much
CSU	1,619	10%	39%	34%	16%
Large Land Grant	12,174	15%	38%	32%	15%
Percentage Point (PP) Difference		-5.0	1.0	2.0	1.0

Table 61 shows that 50% of first-year students surveyed at CSU feel that their institution emphasizes attending events that address important social, economic, or political issues quite a bit or very much, compared to 47% of students surveyed in the LLG comparison group, a 3 PP difference.

Item Level Student-Faculty Interaction Senior Peer Comparisons

In order to understand the survey questions that contributed to the statistically significant difference in the SE construct for CSU seniors in 2019 compared to seniors in the LLG comparison group, the response distribution for survey items with large differences are presented in tables 62 through 66 below.

Table 62: Senior Response Distribution: Student responses to how much their institution emphasizes providing support to help students succeed academically.

	Sample Size	Very little	Some	Quite a bit	Very much
CSU	1,896	4%	22%	46%	28%
Large Land Grant	14,868	5%	25%	45%	25%
Percentage Point (PP) Difference		-1.0	-3.0	1.0	3.0

Table 62 shows that 74% of seniors surveyed at CSU feel that their institution emphasizes providing support to help students succeed academically quite a bit or very much, compared to 70% of students surveyed in the LLG comparison group, a 4 PP difference.

Table 63: Senior Response Distribution: Student responses to how much their institution emphasizes using learning support services.

	Sample Size	Very little	Some	Quite a bit	Very much
CSU	1,905	6%	24%	41%	29%
Large Land Grant	14,880	9%	27%	40%	25%
Percentage Point (PP) Difference		-3.0	-3.0	1.0	4.0

Table 63 shows that 70% of seniors surveyed at CSU feel that their institution emphasizes using learning support services quite a bit or very much, compared to 65% of students surveyed in the LLG comparison group, a 5 PP difference.

Table 64: Senior Response Distribution: Student responses to how much their institution emphasizes providing support for a student's overall well-being.

	Sample Size	Very little	Some	Quite a bit	Very much
CSU	1,900	8%	22%	39%	31%
Large Land Grant	14,819	10%	26%	39%	25%
Percentage Point (PP) Difference		-2.0	-4.0	0.0	6.0

Table 64 shows that 70% of seniors surveyed at CSU feel that their institution emphasizes providing support for a student's overall well-being quite a bit or very much, compared to 64% of students surveyed in the LLG comparison group, a 6 PP difference.

Table 65: Senior Response Distribution: Student responses to how much their institution emphasizes helping students manage their non-academic responsibilities.

	Sample Size	Very little	Some	Quite a bit	Very much
CSU	1,903	30%	36%	24%	10%
Large Land Grant	14,801	35%	37%	20%	8%
Percentage Point (PP) Difference		-5.0	-1.0	4.0	2.0

Table 65 shows that 34% of seniors surveyed at CSU feel that their institution helping students manage their non-academic responsibilities quite a bit or very much, compared to 28% of students surveyed in the LLG comparison group, a 6 PP difference.

Table 66: Senior Response Distribution: Student responses to how much their institution emphasizes attending campus activities and events.

	Sample Size	Very little	Some	Quite a bit	Very much
CSU	1,903	30%	36%	24%	10%
Large Land Grant	14,801	35%	37%	20%	8%
Percentage Point (PP) Difference		-5.0	-1.0	4.0	2.0

Table 66 shows that 34% of seniors surveyed at CSU feel that their institution emphasizes attending campus activities and events quite a bit or very much, compared to 28% of students surveyed in the LLG comparison group, a 6 PP difference.

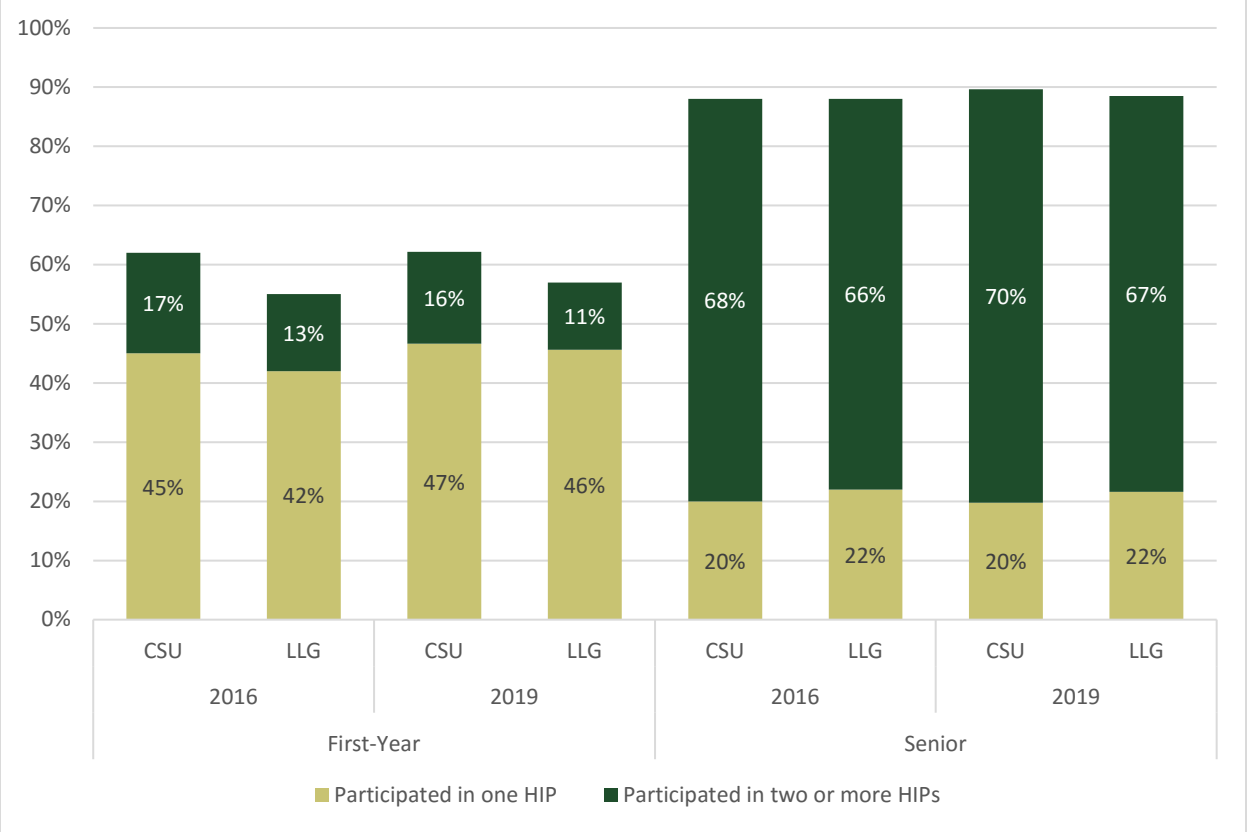
High-Impact Practices

Specific opportunities available to undergraduate students are designated as high-impact because, when done well, they have potential to increase student learning and engagement. As a result, it is recommended that students participate in at least two HIPs over the course of their undergraduate experience, one during their first year and a second one related to their major. First-year students are asked about their participation in a learning community, in a community-based project (service-learning), and in research with a faculty member. In addition to those three HIPs, seniors are asked about their participation in an internship or field experience, study abroad, and a culminating senior experience.

Overall Results

Figure 15 displays the percentage of CSU first-years and seniors who participated in HIPs compared to first-year and senior students in the LLG comparison group in the 2016 and 2019 surveys. The bottom segment in each bar (gold) shows the percentage of students who participated in one HIP, while the top segment (green) shows the percentage of students who participated in two or more HIPs. The full bar (both colors) represented the percentage of students who participated in at least one HIP.

Figure 14: High-Impact Practices Peer Comparison.



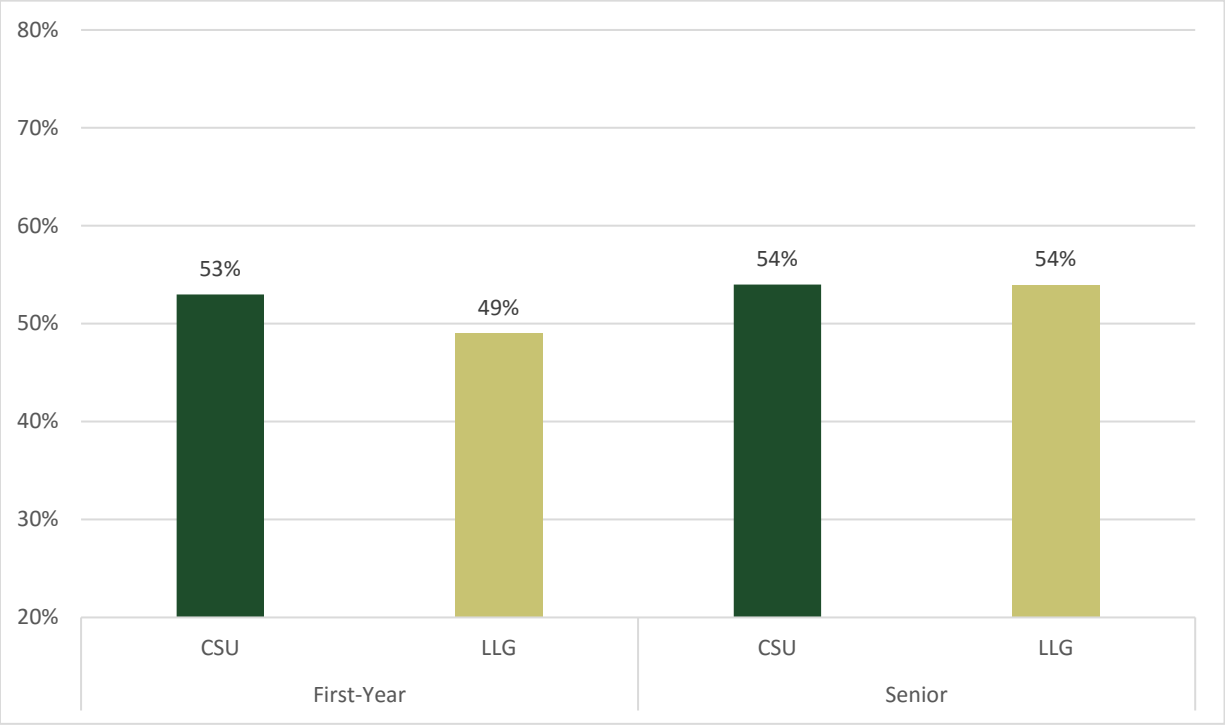
CSU first-year students have higher participation percentages than first-year students in the LLG group in both 2016 and 2019, with 62% of first-years participating in at least one HIP in 2016 compared to 55% in the LLG comparison group and 63% of first-years participating in at least one HIP in 2019 compared to 57% in the LLG comparison group. NSSE does not provide hypothesis tests for these differences but there is a practical difference between CSU first-year student participation compared to first-year students in the LLG comparison group. Additionally, participation in at least one HIP increased for first-year students at both CSU and the LLG comparison group, by 1 PP for the former and 2 PP for the latter.

CSU seniors have the same participation percentages as seniors in the LLG comparison group in 2016 and very slightly higher participation rates in 2019. Participation in at least one HIP increased for CSU seniors from 88% in 2016 to 90% in 2019 because of an increase in the proportion of students that do two or more of these activities. There is an increase of one percentage point (from 88% in 2016 to 89% in 2019) among seniors in the LLG comparison group because of an increase in the percent of students that have two or more of these experiences. There is not a practically important difference between the participation rate for CSU seniors and seniors in the LLG comparison group.

Service-Learning

Figure 16 displays the percentage of first-years and seniors at CSU and in the LLG comparison group who answered in the positive about the number of courses at their institution that have included a community-based project (service-learning).

Figure 15: Participation in Service-Learning.

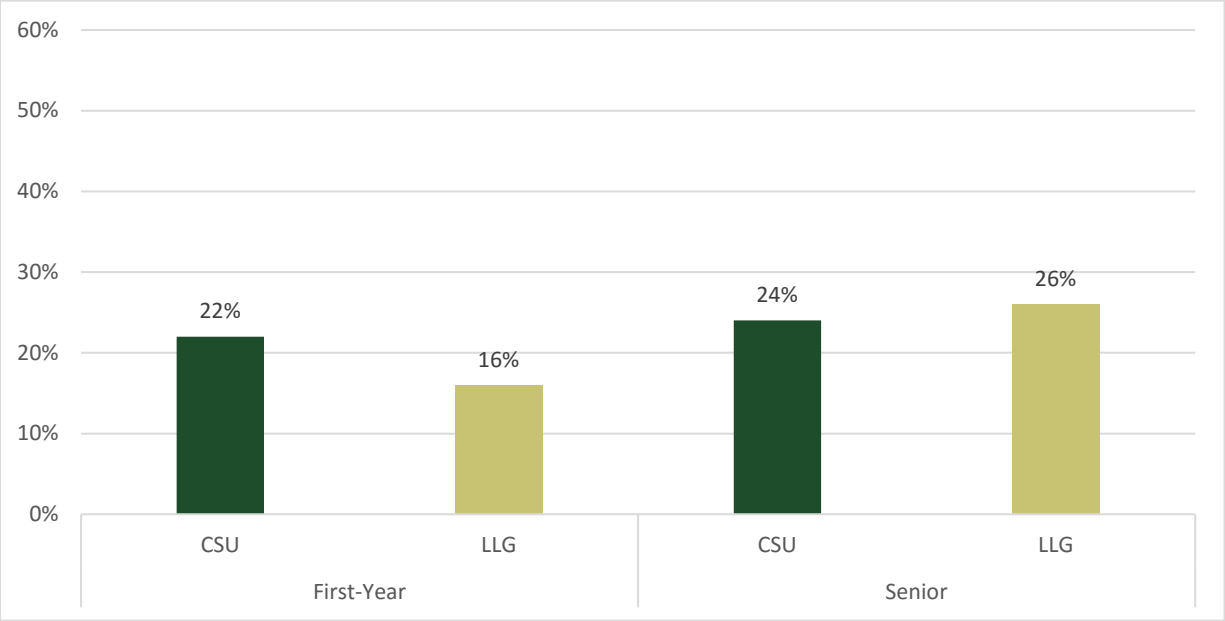


CSU first-year students have higher participation percentages in service-learning than first-year students in the LLG comparison group by 4%, this difference is small but statistically significant with a very small effect size (Cohen's *h*= .09). CSU seniors and seniors in the LLG comparison group have the same participation rates in service-learning, with 54% of students reporting that some, most, or all their courses at their institution have included a community-based project.

Learning Community

Figure 17 displays the percentage of first-years and seniors at CSU and in the LLG comparison group who indicated that they have or are currently participating in a learning community or some other formal program where groups of students take two or more classes together.

Figure 16: Participation in a Learning Community.

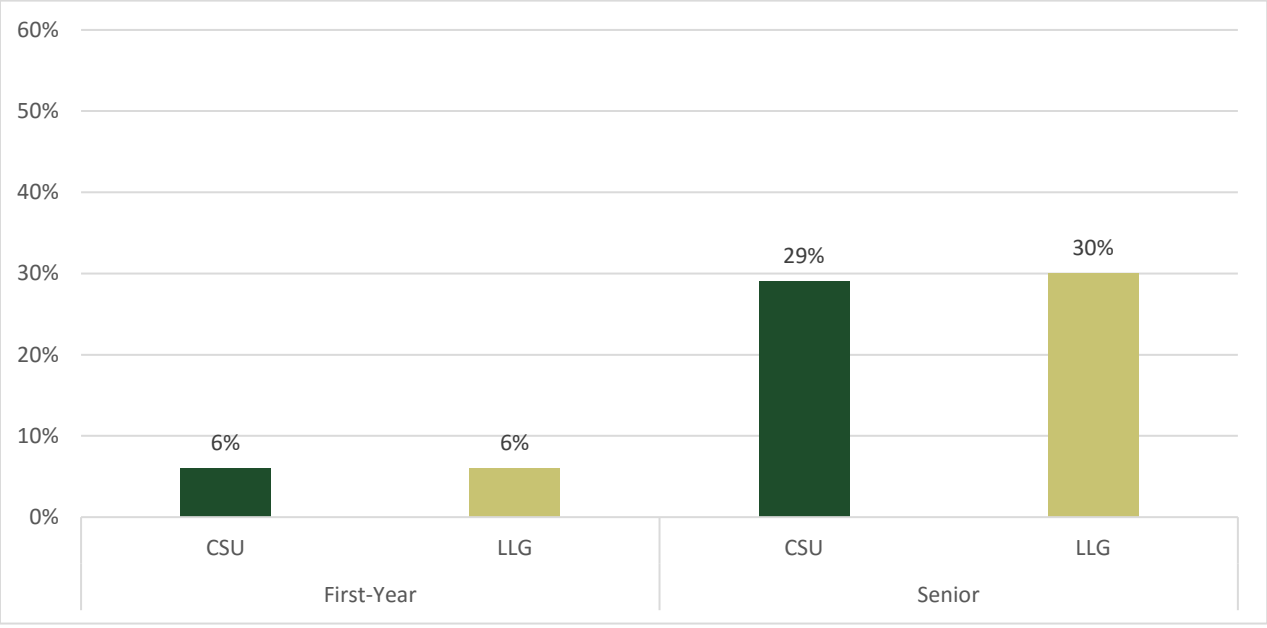


CSU first-year students have higher participation percentages in a learning community than first-year students in the LLG comparison group by 6%, this difference is small but statistically significant with a small effect size (Cohen's *h*= .14). CSU seniors have lower participation percentages in a learning community than seniors in the LLG comparison group by 2%, but this difference is not statistically significant.

Research with Faculty

Figure 18 displays the percentage of first-years and seniors at CSU and in the LLG comparison group who indicated that they have worked or are currently working with a faculty member on a research project.

Figure 17: Participation in Research with Faculty.

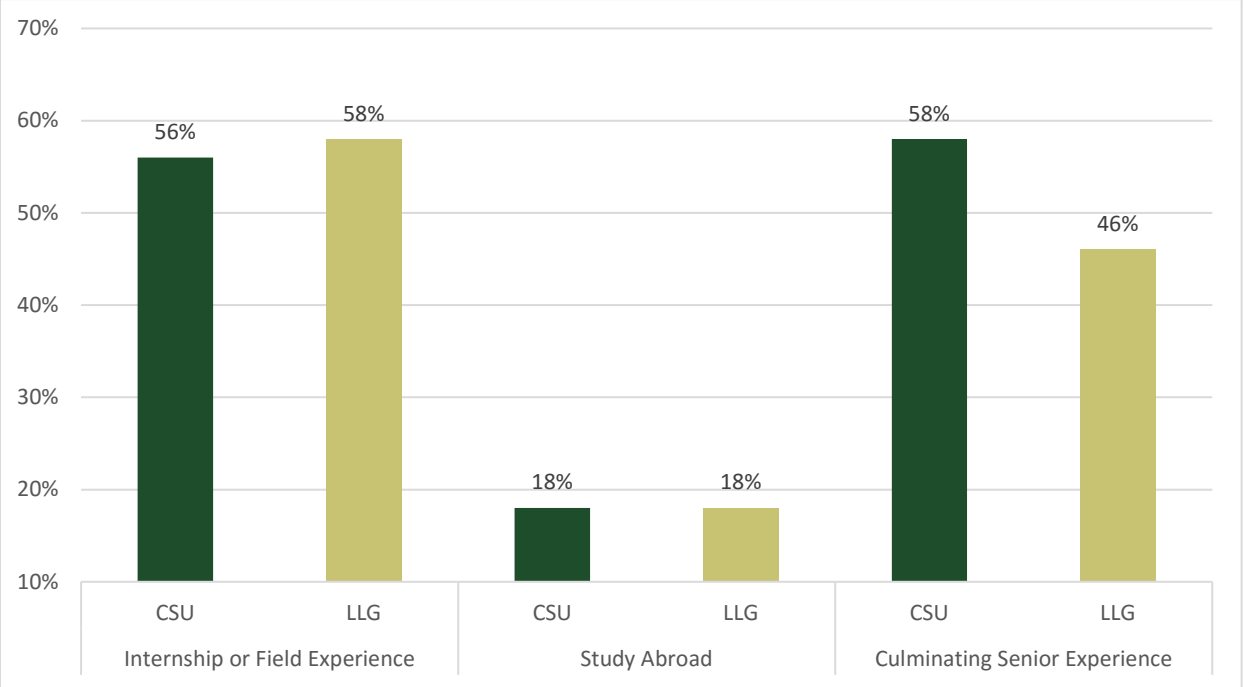


A similar percentage of CSU first-year students and first-year students in the LLG comparison group report that they have worked or are currently working with a faculty member on a research project. CSU seniors have lower participation percentages in research with a faculty member than seniors in the LLG comparison group by 1%, but this difference is not statistically significant.

Other High-Impact Practices

In addition to the three previously discussed HIPs, survey items ask students who identify as seniors about their participation in an internship or field experience, study abroad, and/or a culminating senior experience. Figure 19 displays the percentage of seniors at CSU and in the LLG comparison group who indicated that they have or are currently participating in these three HIPs.

Figure 18: Participation in Other High-Impact Practices.



56% of seniors at CSU report current participation or having participated in an internship or field experience compared to 58% of seniors in the LLG comparison group, a 2 PP difference. This difference is not statistically significant. Around the same percentage of seniors at CSU and in the LLG comparison group report current participation or having participated in study abroad. Finally, 58% of CSU seniors report having participated or current participation in a culminating senior experience compared to 46% of seniors in the LLG comparison group, a 12 PP difference. This difference is statistically significant with a small effect size (Cohen's *h*= .23).

Conclusions

CSU first-years' mean scores are statistically higher than those of first-year students in the LLG comparison group for nine out of ten engagement indicators. Mean scores for the tenth engagement indicator, Discussions with Diverse Others, are not significantly different from those of first-years in the LLG comparison group. Additionally, CSU first-years had higher participation rates in HIPs than first-years in the LLG comparison group.

The mean scores for CSU seniors are statistically higher than those of seniors in the LLG comparison group in five out of ten engagement indicators. CSU seniors' mean scores are statistically lower than those of seniors in the LLG comparison group in the Discussions with Diverse Others engagement indicator. There is no statistically significant difference in mean scores in the four remaining engagement indicators. Additionally, seniors at CSU had very slightly higher participation rates in HIPs than seniors in the LLG comparison group.

Across most engagement indicators, mean responses increased in 2019 compared to 2016 for all CSU students. This trend is more pronounced for seniors than for first-year students.