### **ESSEX COUNTY COLLEGE**

# Community College Survey of Student Engagement Summary Report

Office of Institutional Advancement

Institutional Planning, Research and Assessment 11/29/2011

#### Overview

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

The CCSSE is an important component of the college's Framework for Assessment, providing evidence that can be linked to accreditation standards. CCSSE is mapped to Middle States Commission Higher Education (MSCHE) Standards and most of the results discussed in this report are related to either Standard 14, Assessment of Student Learning or Standard 8, Student Admissions and Retention. CCSSE findings and benchmark scores are used to support and document the college's institutional improvement efforts. However, the information is most meaningful when coupled with other institutional measures of student learning outcomes.

The CCSSE has benchmarks of conceptually related survey items that address key areas of student engagement. These benchmark areas are: Active and Collaborative Learning, Student Effort, Academic Challenge, Student-Faculty Interaction, and Support for Learners. According to CCSSE these areas are described as:

#### **Active and Collaborative Learning**

Students learn more when they are actively involved in their education and have opportunities to think about and apply what they are learning in different settings. Through collaborating with others to solve problems or master challenging content, students develop valuable skills that prepare them to deal with the kinds of situations and problems they will encounter in the workplace, the community, and their personal lives.

#### Student Effort

Students' behaviors contribute significantly to their learning and the likelihood that they will attain their educational goals. "Time on task" is a key variable, and there are a variety of settings and means through which students may apply themselves to the learning process.

#### **Academic Challenge**

Challenging intellectual and creative work is central to student learning and collegiate quality. These survey items address the nature and amount of assigned academic work, the complexity of cognitive tasks presented to students, and the standards faculty members use to evaluate student performance.

#### **Student-Faculty Interaction**

In general, the more interaction students have with their teachers, the more likely they are to learn effectively and persist toward achievement of their educational goals. Personal interaction with faculty members strengthens students' connections to the college and helps them focus on their academic progress. Working with an instructor on a project or serving with faculty members on a college committee lets students see first-hand how experts identify and solve practical problems. Through such interactions, faculty members become role models, mentors, and guides for continuous, lifelong learning.

#### **Support for Learners**

Students perform better and are more satisfied at colleges that are committed to their success and cultivate positive working and social relationships among different groups on campus. Community college students also benefit from services targeted to assist them with academic and career planning, academic skill development, and other areas that may affect learning and retention.

In addition to examining these benchmark areas, data from two global questions will be compared for the two ECC cohorts.

- 1. "Would you recommend this college to a friend or family member?"
- 2. "How would you evaluate your entire educational experience at this college?"

#### **Purpose**

The purpose of this study is to compare the responses of ECC students with the responses of other college students on each benchmark to determine how the college can improve the college experience in order to increase student engagement and thus increase student retention. In order to accomplish this, data from the Spring 2011 respondents will be compared to the following groups:

- 1. ECC students who completed the CCSSE in Spring 2006
- 2. A sample of students who attended a Predominantly Black Institution (PBI)
- 3. New Jersey community college students who participated in CCSSE in 2009 -2011
- 4. The national CCSSE cohort (students who participated in 2009-2011).

#### Methodology

The CCSSE was administered to a randomly selected sample of students during Spring 2011. The random sample was selected by CCSSE. On Table 1 (following page), basic demographic variables for 850 ECC respondents is compared with those of our general population, those of large (8,000-14,999) colleges as well as with the total 2011 cohort of 699 institutions. One area of concern, that impacts comparisons, is the difference in the racial background of the respondents. At ECC 39% of the respondents identified themselves as Black or African American as compared with 14% for the CCSSE comparison groups. In order to evaluate the possible effects of race, a special report was run comparing ECC respondents with other PBI's. Results proved to be very similar to the CCSSE comparison groups. The other concern was the lower percentage of part-time students in our sample. This has been corrected by CCSSE by using robust statistical weighting procedures.

#### Table 1

## Respondents to Underlying Population Comparisons: Comparison Group and All 2011 CCSSE Colleges Essex County College

	ECC Respondents Count	ECC Respondents Percent	Your Population	Size Group Comparison Population	2011 Cohort Colleges Population	
Gender						
Male	345	41%	41%	43%	43%	
Female	505	59%	59%	57%	57%	
Race or Ethnicity						
American Indian or Other Native American	4	0%	0%	1%	1%	
Asian, Asian American, or Pacific Islander	39	5%	4%	5%	5%	
Black or African American, Non-Hispanic	327	39%	50%	14%	13%	
White, Non-Hispanic	84	10%	12%	54%	56%	
Hispanic, Latino, Spanish	168	20%	22%	14%	14%	
Other	58	7%	8%	10%	9%	
International Student of Foreign National	150	18%	5%	2%	2%	
Age						
18 to 19	181	21%	22%	25%	25%	
20 to 21	169	20%	19%	19%	18%	
22 to 24	144	17%	16%	15%	15%	
25 to 29	139	17%	15%	14%	14%	
30 to 39	121	14%	15%	14%	15%	
40 to 49	63	7%	9%	8%	8%	
50 to 64	23	3%	4%	4%	4%	
65 and over	2	0%	0%	0%	1%	
Enrollment Status						
Part-Time	181	20%	41%	56%	58%	
Full-Time	705	80%	59%	44%	42%	

#### Notes:

Population data are those reported by colleges for the most recent IPEDS enrollment report.

Respondent data include only data used in the national  $\mathit{CCSSE}$  analysis as in accordance with

CCCSE data exclusion rules.

#### **Results**

There are literally thousands of comparisons that can be made in any review of CCSSE data. For example, the CCSSE has 147 evaluative statements to which one could, on an average, select one of four choices. This alone provides 588 frequency data points. When comparisons are made among four different cohorts the number of frequency data points increases to approximately 2,500. It is for this reason that this report will concentrate on the benchmark areas where our students had the largest mean differences between cohorts.

Means reports present an average of all responses for a particular type of survey item. These analyses compare average item responses for survey items that have scaled responses (e.g., strongly agree to strongly disagree) between member colleges and various groups (e.g., similarly sized colleges), or between subgroups within a college. Means reports also provide a test statistic, effect size, and a visual indicator of whether these two means are practically different. The data reported for the comparison of ECC 2011 CCSSE to the NJ Consortium and total College cohort are based on those benchmark items where there is a noted statistical difference. The comparisons between ECC 2011 and ECC 2006 cohorts and the PBI cohort are based on examinations of frequency distributions for each item. The items with the largest percentage differences were, in general, chosen for review.

Table 2
CCSSE Mean Comparisons by Cohort

All Students	2011 ECC	2006 ECC	Diff.	2011 PBI	Diff.	2011 NJ	Diff.	2011 Cohort	Diff.
Active and Collaborative Learning	58.0	54.1	3.9	52.0	6.0	49.3	8.7	50.0	8.0
Student Effort	59.2	58.9	0.3	52.2	7.0	49.1	10.1	50.0	9.2
Academic Challenge	59.5	57.5	2.0	52.2	7.3	50.7	8.8	50.0	9.5
Student-Faculty Interaction	55.3	48.9	6.4	50.0	5.3	50.7	4.6	50.0	5.3
Support for Learners	52.7	54.1	-1.4	51.0	1.7	48.3	4.4	50.0	2.7

Table 2 above shows the overall benchmark areas (Active and Collaborative Learning, Student Effort, etc.) and the mean of each cohort and the difference between comparative cohorts. For example, looking at the Active and Collaborative Learning benchmark and the results of the 2006 ECC cohort, the mean for the 2006 ECC cohort was 54.1 and the mean for the 2011 ECC cohort was 58.0 indicating a difference of 3.9. Similar comparisons can be made between 2011 ECC and the cohort from selected PBI's; between 2011 ECC and 2011 New Jersey cohort of those colleges over the past three years who participated in CCSSE; and, between 2011 ECC and the entire 2011 cohort of institutions across the country who participated in CCSSE over the past three years.

By comparing the summary means in Table 2 it is important to note the benchmark areas with positive and negative change. Particularly noteworthy is the fact that ECC's 2011 cohort scored higher in 19 out of 20 benchmark comparisons indicating students reported a high degree of student engagement at our college. The only decrease was in Support for Learners (-1.4) for the comparison between the 2011 and 2006 ECC cohorts. Nevertheless, a closer review of frequency data on items that constitute the benchmarks will reveal areas for improvement.

Figure 1 is a graphic representation of the benchmark comparisons data in Table 2. ECC mean scores are higher than those in the comparative cohorts with the exception of Support for Learners where the 2011 ECC mean was lower than the 2006 ECC mean. In addition this table contains the means for the 2011 top performing colleges. When compared with the 2011 top performing college, our mean was higher in Student Effort and Academic Challenge areas. Our mean was lower in the Active and Collaborative Learning and Student-Faculty Interaction areas and much lower in the Support for Learners.

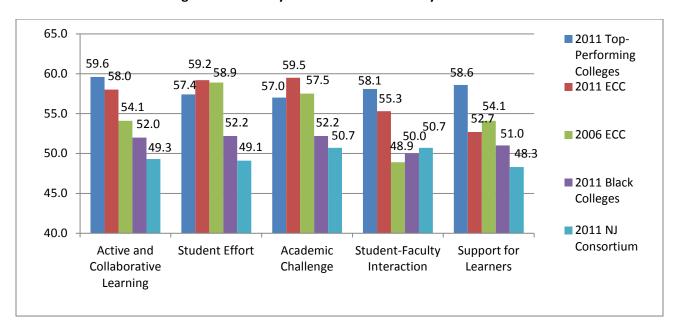


Figure 1: Summary of Benchmark Means by Cohort

Note: The benchmark means for the total 2011 CCSSE cohort are 50.0 in all areas.

#### ECC 2006 and ECC 2011 Comparison

The data in Figures 2 – 6 show the comparison among the responses of the **ECC 2006** cohort who participated in CCSSE and the **2011** cohort. The responses were chosen for review based on the large percentage difference between the cohort responses.

Figure 2 pertains to the benchmark Active and Collaborative Learning and contains a comparison of student responses to three questions. It is apparent that more respondents in the 2011 cohort report that they "very often" or "often" made a class presentation compared with the 2006 cohort (40% vs. 28.3%), discussed ideas from their reading or classes with others outside of class (59.1% vs. 51.4%), and worked with classmates outside of class to prepare class assignments (31.3% vs. 24.9%). Active and Collaborative Learning improved from 2006 to 2011.

Figure 3 pertains to the benchmark Student Effort. According to the results, student effort increased in three areas. More respondents in the 2011 cohort compared with the 2006 cohort reported that they "often" or "very often" worked on a paper or project "that required integrating ideas or information from various sources" (71.4% in 2011 vs. 63.7% in 2006). More in the 2011 cohort also reported that they "often" or "sometimes" used a computer lab (74.0% vs. 67.3%) and the percentage also increased in those reporting that they prepared for class over 6 hours per week (58.7% in 2011 vs. 53.6% in 2006).

However, some areas in Student Effort decreased for the 2011 cohort compared to the 2006 cohort. Specifically the number of books read (5 or more) on their own decreased from 32.6% in 2006 to 29.1% in 2011 and the frequency of those "often" or "sometimes" reported that they used a learning skills laboratory decrease from 49.9% in 2006 to 47.1% in 2011. In addition, the percentage who reported "very often" or "often" that they prepared two or more drafts before turning a paper decreased slightly from 57.5% in 2006 to 56.3% in 2011.

Figure 4 pertains to the benchmark Academic Challenge. There are three areas where the 2011 cohort improved over the 2006 cohort. More respondents indicated that they "very often" or "often" worked harder than they thought to meet an instructor's expectations (67.2% in 2011 vs. 55.9% in 2006) and more respondents indicated that they "very much" or "quite a bit" made judgments on the values or soundness of information or arguments (63.1% vs. 53.9%). In addition more reported that they "very much" or "quite a bit" analyzed the basic elements of an idea, experience or theory (78.5% vs. 69.9%). Slightly fewer students reported writing five or more papers of any length (69.0% vs. 69.6%). Overall the 2011 cohort reported that they were more challenged than they had been in 2006.

Figure 5 pertains to the benchmark Student-Faculty Interaction. There are three areas where the 2011 cohort improved over the 2006 cohort. Significantly more respondents

indicated that they "very often" or "often" used e-mail to communicate with an instructor (60.2% in 2011 vs. 30.7% in 2006) and more respondents indicated that they "very often" or "often" discussed grades or assignments with an instructor (55.6% vs. 44.1%). In addition, almost 11% more of the respondents in the 2011 cohort reported that they "very often" or "often" received prompt feedback from instructors on their performance (61.4% vs. 50.4%).

The final comparison between the 2006 and 2011 cohorts is on Figure 6 for the benchmark Support for Learners. There appears to be less of a difference in this area than in some of the other benchmark areas. In response to the prompt "How much does this college emphasize each of the following", there was a slight increase in the respondents who indicated "very much" or "quite a bit" that the college provided financial support they need to afford their college (49.8% vs. 43.1%); that the college encouraged contact among students from different social, and racial or ethnic backgrounds (58.2% vs. 54.1); and that the college provided the support they need to help success in college (66.8% vs. 63.8%). There was a slight decrease between the 2011 and 2006 respondents in the percentage reporting that they "often" or "sometimes" used career counseling (34.8% vs. 37.3%) as well as a slight decrease in the percentage reporting that they "often" or "sometimes" used academic advising/planning (57.5% vs. 58.1%). The fact than approximately only 6 out of 10 respondents reported using academic advising is a concern. This means that 4 out of 10 respondents reported that they "rarely/never" used academic advising.

100.0% 90.0% Very Often & Often Very Often & Often 80.0% 70.0% 59.1% 60.0% 51.4% Very Often & Often 50.0% 40.0% 40.0% 31.3% 28.3% 24.9% 30.0% 20.0% 10.0% 0.0% Made a class presentation Discussed ideas from your Worked with classmates outside readings or classes with others of class to prepare class outside of class assignments □ ECC 2006 ■ ECC 2011

Figure 2: CCSSE ECC 2006 & 2011 Comparison

Active and Collaborative Learning Frequency Distributions

Figure 3: CCSSE ECC 2006 & 2011 Comparison Student Effort Frequency Distribution

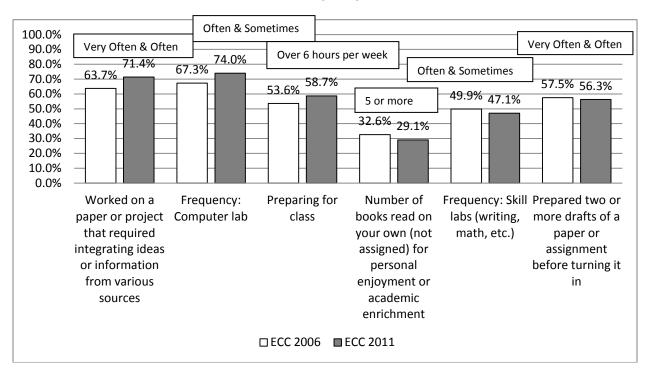


Figure 4: CCSSE ECC 2006 & 2011 Comparison Academic Challenge Frequency Distributions

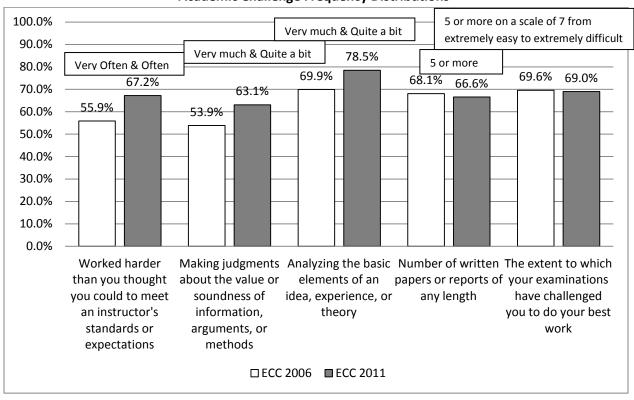


Figure 5: CCSSE ECC 2006 & 2011 Comparison
Student-Faculty Interaction Frequency Distributions

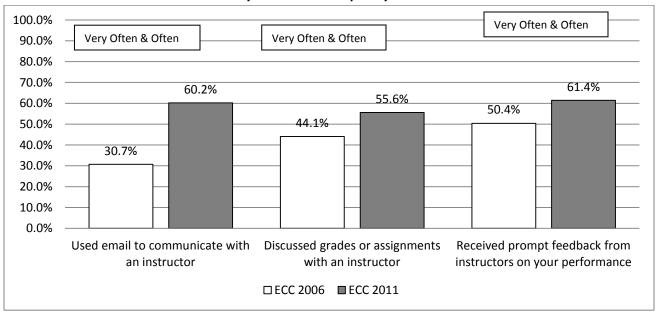
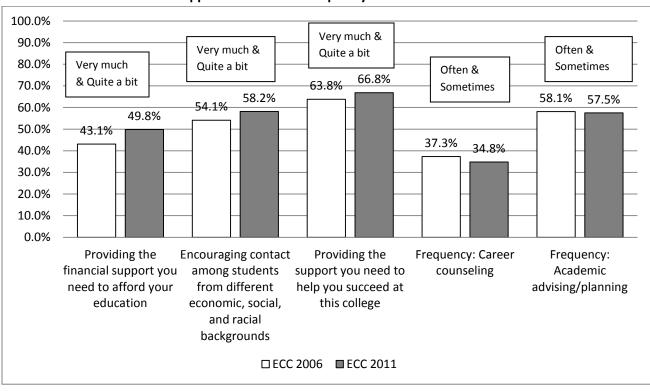


Figure 6: CCSSE ECC 2006 & 2011 Comparison Support for Learners Frequency Distributions



#### ECC 2011 Comparison with Predominantly Black Colleges (PBI's)

The data on Figures 7 – 11 (see Appendix A) show the comparison among the responses of the ECC 2011 cohort who participated in CCSSE and a comparison cohort from PBI's. The colleges selected for this custom cohort are: Baltimore City Community College (MD), Community College of Philadelphia (PA), Delgado Community College (LA), Merritt College (CA), Prince George's Community College (MD), Savannah Technical College (GA), St. Louis Community College at Forest Park (MD), and Wayne County Community College District (MI). The data for review was based on the largest percentage difference between cohorts in choosing a response. Again, ECC respondents indicated that they were more generally engaged than this comparison group.

The data can be interpreted in the same way as described for Figures 2 - 6. The implication of the data will be discussed in the discussion section.

#### ECC 2011 Comparison with New Jersey Consortium

The data on Figures 12 – 16 (see Appendix B) show the comparison among the responses of **ECC 2011** cohort who participated in CCSSE and **a cohort made up of a consortium of New Jersey Community College that participated in the CCSSE over the past three years** (Bergen, Brookdale, Burlington, Camden, Morris, Cumberland, Gloucester, Hudson, Ocean, Passaic, and Raritan Valley). The items chosen for review were based on the significant difference between the means of the items rather than the percentage difference.

The data on these Tables can be interpreted as mentioned before. The implications of the data will be discussed in the discussion section.

#### ECC 2011 Comparison with 2011 National Sample

Figures 17 - 21 (see Appendix C) pertain to the same benchmark areas for the national sample. There were 699 community colleges in the national sample and data is reported on approximately 440,000 students.

Note, the items chosen for review were based on the significant difference between the means of the items rather than the percentage difference. The data on these Tables can be similarly interpreted as mentioned before. The implications of the data will be discussed in the discussion section.

#### **Summative Questions**

The two summative questions asked were:

- 1. "Would you recommend this college to a friend or family member?"
- 2. "How would you evaluate your entire educational experience at this college?

The specific results are in Table 3 below:

ECC 2011 ECC 2006 NJ Consortium 2011 Cohort 1. Would you recommend this college Yes 85.5% 86.4% 90.7% 93.9% to a friend or family member? 14.5% 9.3% 6.1% No 13.6% 2. How would you evaluate your Poor 3.9% 3.1% 2.4% 1.5% entire educational experience at this Fair 22.1% 19.7% 17.6% 13.4% college? 52.2% 60.4% 57.3% 54.4% Good Excellent 21.8% 16.8% 22.6% 30.7%

**Table 3 Two Summative Questions** 

With regard to question (1) "Would you recommend this college to a friend or family member?", 85.5% of the 2011 ECC respondents indicated "yes". This is slightly down from those indicating "yes" in 2006 and also 5.2% fewer than those in the New Jersey Consortium and 8.4% fewer than in the national sample of all colleges. In addition, the percentage indicating that their entire educational experience at ECC was "good" or "excellent" decreased from those responding in 2006 of 77.2% to 74.0% and was also lower than the New Jersey Consortium (which was 79.9%) and over 10% lower than the 2011 cohort colleges (85.1%).

#### **Discussion and Summary**

As mentioned in the results section, there are many ways to interpret and compare the self-reported data from CCSSE. One way to review what is most meaningful is to look at each benchmark area in a summative manner. It is important to note that the items chosen for review had to meet one of three criteria: (1) there was a large percentage difference in the response between groups, (2) there was a significant difference between overall means. Also considered was the degree to which they directly related to MSCHE accreditation standards 8 or 14. This ability to compare ECC student responses with other cohorts reveals areas where ECC is doing well in fostering student success and areas where more focus is needed.

With regard to <u>Active and Comparative Learning</u> our students appear to be more engaged than those in the comparison groups. In general, students learn more when they are actively involved in their learning. In particular, our students are statistically more likely to:

- Have made a presentation in class;
- Have worked with classmates outside of class to prepare a class assignment;
- Discuss ideas from their readings with other outside of class
- Have tutored or taught other students.

The 2011 CCSSE respondents when compared to the 2006 respondents reported that they more often:

- Made a classroom presentation;
- Discussed ideas from their readings or class with others outside of class;
- Worked with classmates outside of class to prepare class assignments.

The second major benchmark area is **Student Effort**. Again ECC students appear to apply themselves and are more engaged than those in the comparison groups. Our students were more likely to:

- Use a computer lab;
- Use peer or other tutoring;
- Work on a paper or project that required integrating ideas or information from various sources;
- Use a skill lab (writing, math, etc.)

When compared with the responses of the 2006 ECC cohort it is noteworthy that the 2011 respondents were slightly less likely to:

- Read 5 or more books for enjoyment;
- Use skill labs (writing, math, etc.);
- Prepare two or more drafts of a paper as an assignment before turning it in.

The third major benchmark area is <u>Academic Challenge</u>. Challenging work is central to student learning. ECC respondents indicated that they were more challenged than the comparison groups. Specifically, ECC respondents were more likely to:

- Have to write 5 or more papers of any length;
- Have 5 or more assigned textbooks, manuals or course readings;
- Work harder than they thought to meet ECC standards;
- Be asked to synthesize and organize ideas, information or experiences in new ways;
- Use information they read or heard to perform a new skill;

When ECC's 2011 data are compared with the data from those who responded to the 2006 CCSSE it is evident that the 2011 cohort thought the college was, in general, more academically challenging now than in 2006.

<u>Student Faculty Interaction</u> is consistently linked to academic persistence and success. Research shows the more interaction students have with their teachers the more likely they are to learn. Respondents indicated that they were more likely to:

- Use e-mail to communicate with an instructor;
- Discuss grades or assignments with an instructor;
- Discuss ideas from readings or classes with instructors outside of class;
- Talk about career plans with an instructor or advisor.

It is noteworthy that the percentage of respondents who indicated that they used email to communicate with an instructor increased from 30.7% in 2006 to 60.2% in 2011. Other responses indicating an increase were in the percentage reporting that they discussed grades or assignments with an instructor and more respondents indicated that they received prompt feedback from instructors on their performance.

<u>Support for Learners</u> is the final benchmark area reviewed. Students perform better and are more satisfied at colleges that are committed to their success. For the most part our respondents indicated they found the college was more supportive than the respondents at other colleges. More specifically, our respondents thought the institution:

- Encouraged contact among students from different economic, social, and racial or ethnic backgrounds;
- Provided the support they needed to thrive socially.

In addition more respondents indicated that they sought career counseling. However, slightly fewer respondents at ECC sought academic advising/planning. In fact, 6 out of 10 responded that they "often" or "sometimes" sought such advisement. This is not that different from the CCSSE results at other institutions but it should be of general concern that 40% "rarely/never" sought academic advisement.

When ECC's 2011 data is compared with the data from those who responded to the 2006 CCSSE it is evident that the 2011 cohort thought the college increased its emphasis in:

- Providing financial support;
- Encouraging contact among students from different economic, social, and racial or ethnic backgrounds;

Providing the support they need to help succeed at ECC.

In general, ECC can be proud that the respondents indicated that they were more engaged than those in the various comparative cohorts. Nevertheless, there are areas where the college does not meet the benchmarks of top-performing colleges. In the benchmark areas of Student Effort and Academic Challenge the ECC means are higher than those of the 2011 top-performing colleges. However, the means for ECC are slightly lower than those in Active and Collaborative Learning, (See Figure 1 – 58.0% vs. 59.6%), somewhat lower in Student-Faculty Interaction (55.3% vs. 58.1%), and significantly lower in Support for Learners (52.7% vs. 58.6%). The CCSSE system does not allow one to drill down in each of these areas to examine the difference by item. These summative comparisons do suggest that in order to increase student engagement the college should consider improving our Support for Learners. This could involve efforts to increase the frequency with which students sought academic advisement and career counseling. In addition, ECC may want to consider ways in which the college could better emphasize financial support and better help students to cope with academic and non-academic issues. This could be done by improving advising, counseling and financial aid services to students.

The college could also improve Student-Faculty Interaction by encouraging faculty to set aside more time to discuss grades or assignments with students. It would also serve to engage students if faculty would give prompt feedback to students regarding their performance in class. Faculty are knowledgeable about career opportunities in their areas and could provide occupational and career information to students.

The fact that the percentage indicating that their entire educational experience at ECC was "good" or "excellent" has decreased from 2006 to 2011 is of concern. Nearly 25% of the respondents indicated that their entire educational experience at ECC was "fair" or "poor". This warrants further study to determine what problems they may have experienced that would cause them to give the college such a rating.

#### Recommendations

ECC 2011 CCSSE respondents appear to be more engaged than respondents in similar institutions. However, there is always room for improvement as the college strives to become a top-performing college. Immediate action could be taken to increase student-faculty interaction and improve support to learners. ECC should:

- Improve the advisement process and include more faculty in that process
- Improve personal and financial counseling
- Provide career guidance to our students

 Notify students promptly regarding their class performance and make them aware of the resources available to help them accomplish their educational goals.

The data presented in this report are representative of what can be obtained from the CCSSE results. Additional information can be gleaned from CCSSE data. It is strongly recommended that one begin with research questions which may be able to be answered by drilling down into CCSSE data. A good example would be a follow-up question regarding the recommendation to improve the advisement process. For example, "How important do ECC students consider academic advisement?" From CCSSE it can be noted that 66.4% consider it "very important" and that this percentage is consistent with national sample. Another important question would be, "How satisfied are you with academic advisement?" Some 13.1% indicated "Not at all" compared with 11.7% of those in the national sample. This is down from 14.3% of the 2006 CCSSE respondents who indicated "Not at all."

The CCSSE is also cross referenced with accreditation standards for each of the six major accreditation organizations. This is particularly important to review these data as part of the monitoring report for Middle States. The cross walk between MSCHE Standard 8 (Student Admissions and Retention) and the CESSE has 16 directly related items to this standard and this report contains the results of 7 of these items. With regard to Standard 14 (Assessment of Student Learning) there are 26 CCSSE items directly related and this report contains the results of 18 of these. A further review of these items may provide important information for the monitoring report. With reference to the upcoming monitoring report, it is recommended that the college provide a broad exposure to the benchmarks to encourage individuals and departments with common terminology as they prepare the accreditation report.

CCSSE is designed to provide data to help the college effect change based on the best evidence possible. It is recommended that the college administer the survey again in three years to measure whether student and institutional performance are moving in the targeted direction.

## **Appendix A**

## Comparisons with Primary Black Institutions Figures 7-11

Figure 7: CCSSE ECC & Predominantly Black Institutions Comparison
Active and Collaborative Learning Frequency Distributions

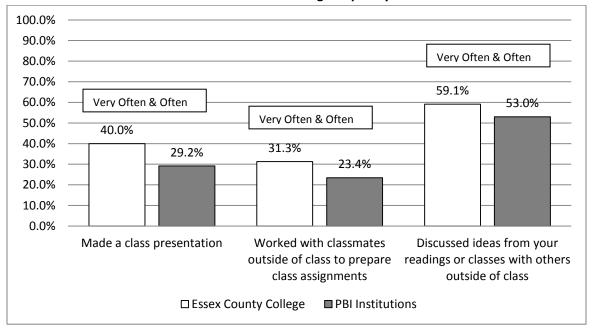


Figure 8: CCSSE ECC & Predominantly Black Institutions Comparison
Student Effort Frequency Distributions

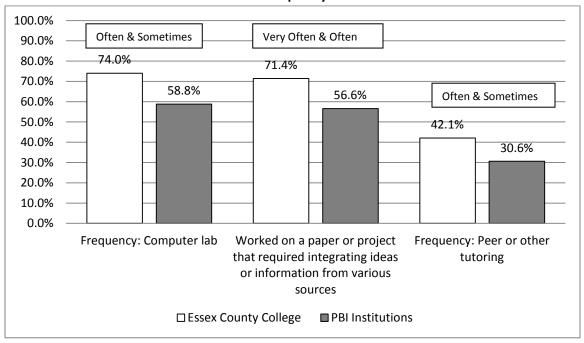


Figure 9: CCSSE ECC & Predominantly Black Institutions Comparison
Academic Challenge Frequency Distributions

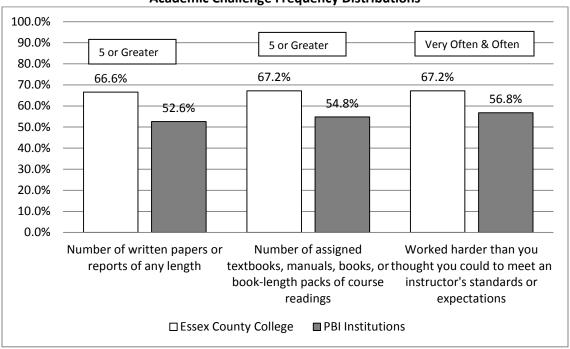
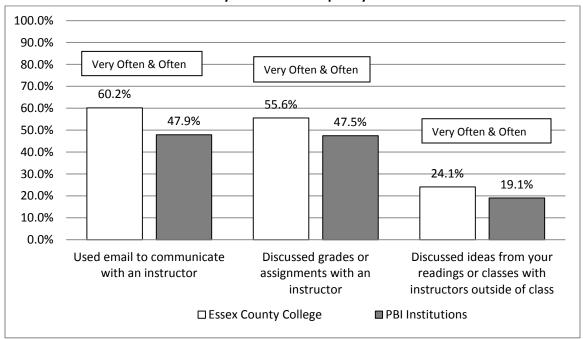


Figure 10: CCSSE ECC & Predominantly Black Institutions Comparison Student-Faculty Interaction Frequency Distributions



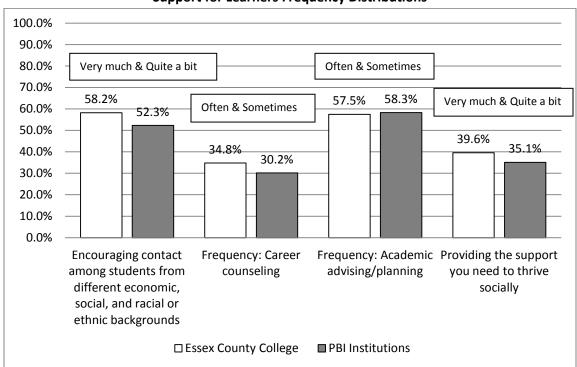


Figure 11: CCSSE ECC & Predominantly Black Institutions Comparison Support for Learners Frequency Distributions

## **Appendix B**

Comparisons with NJ Consortium Figures 12-16

Figure 12: CCSSE ECC & NJ Consortium Comparison
Active and Collaborative Learning Frequency Distributions

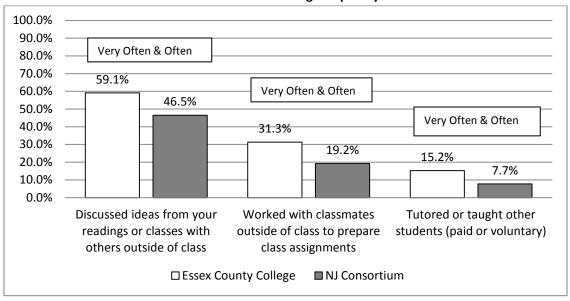


Figure 13: CCSSE ECC & NJ Consortium Comparison

#### **Student Effort Frequency Distributions**

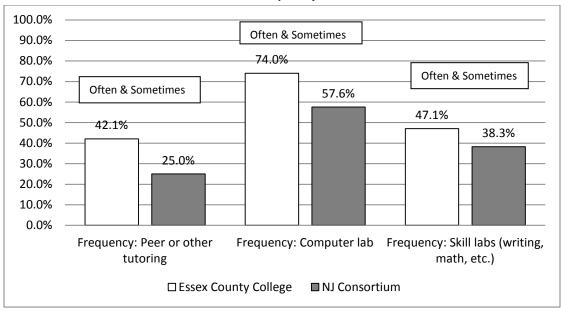


Figure 14: CCSSE ECC & NJ Consortium Comparison Academic Challenge Frequency Distributions

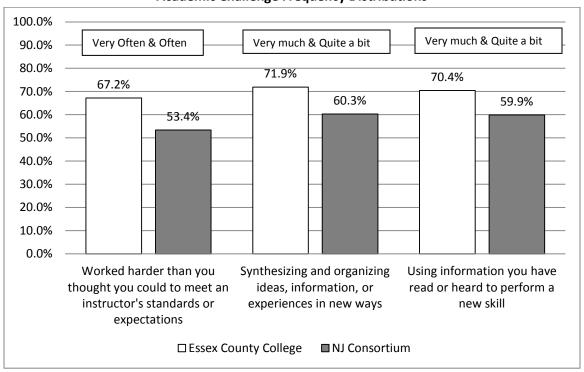
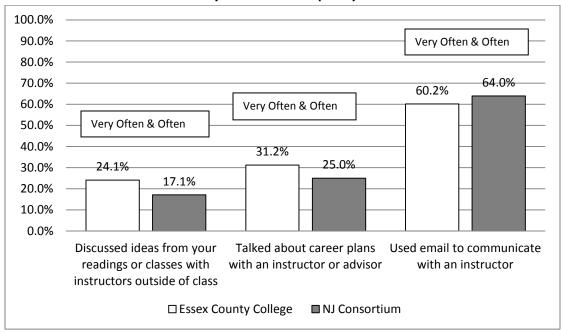


Figure 15: CCSSE ECC & NJ Consortium Comparison

#### **Student-Faculty Interaction Frequency Distributions**



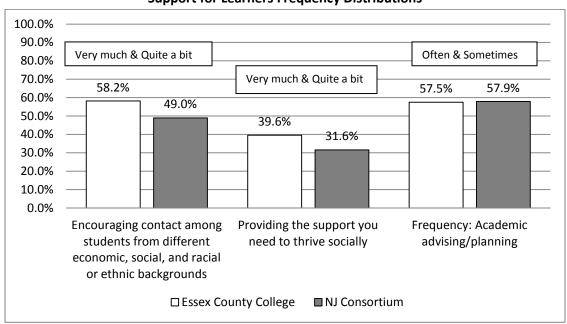


Figure 16: CCSSE ECC & NJ Consortium Comparison Support for Learners Frequency Distributions

## **Appendix C**

**Comparisons with National Sample Figures 17-21** 

Figure 17: CCSSE ECC & 2011 Cohort Comparison

Active and Collaborative Learning Frequency Distributions

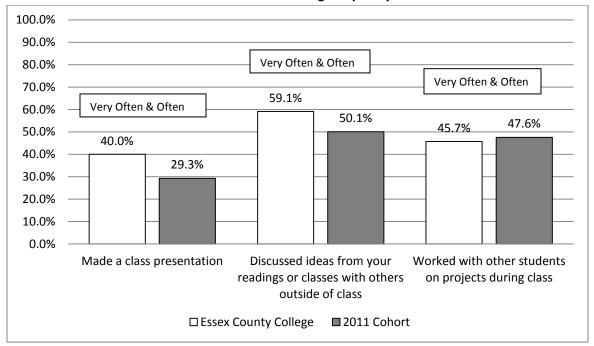


Figure 18: CCSSE ECC & 2011 Cohort Comparison Student Effort Frequency Distributions

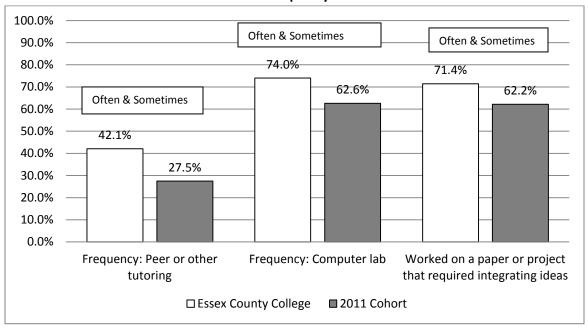


Figure 19: CCSSE ECC & 2011 Cohort Comparison
Academic Challenge Frequency Distributions

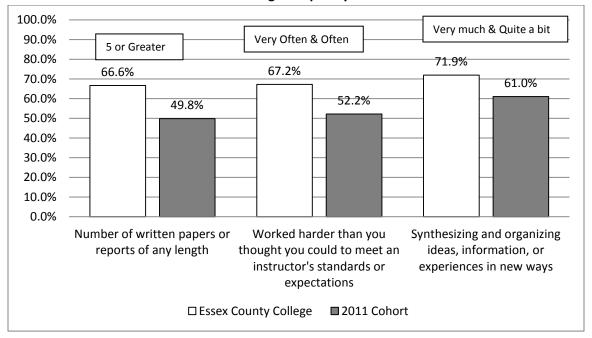
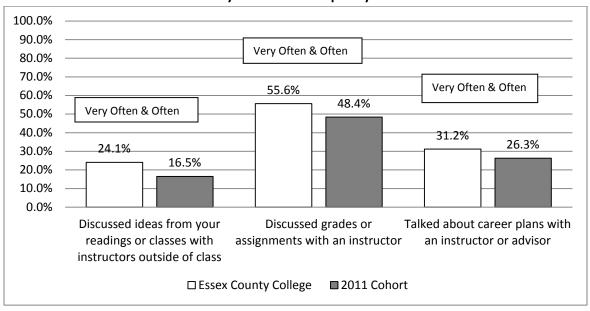


Figure 20: CCSSE ECC & 2011 Cohort Comparison Student-Faculty Interaction Frequency Distributions



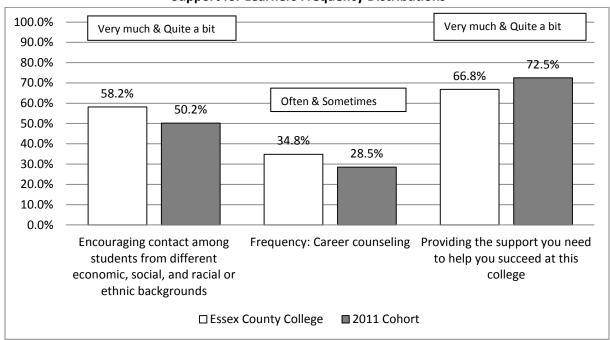


Figure 21: CCSSE ECC & 2011 Cohort Comparison Support for Learners Frequency Distributions