San Diego Mesa College Research Committee RESEARCH BRIEF #3: Student Effort The Community College Survey of Student Engagement (CCSSE) Series June 2008

INTRODUCTION

The first issue of this publication, *Research Brief #1: The Five Benchmarks*, from the series on the Community College Survey of Student Engagement (CCSSE) provided a high-level overview of Mesa's Spring 2007 CCSSE survey results by covering the five benchmarks of student engagement: Active & Collaborative Learning, Student Effort, Academic Challenge, Student-Faculty Interaction, and Support for Learners. Under the direction of the Mesa Research Committee, *Research Brief #2: Support for Learners* drilled deeper into the individual survey items that constitute the Support for Learners benchmark. This third *Research Brief #3: Student Effort* takes a close look at the benchmark of Student Effort, which is based on the premise that students' own behaviors contribute significantly to their learning and the likelihood that they will successfully attain their educational goals.

SETTING THE CONTEXT

Community College Survey of Student Engagement (CCSSE): a voluntary, nation-wide survey which provides information on student engagement, a key indicator of learning: CCSSE, which was administered in Spring 2007 to randomly selected Mesa students, asks questions that assess institutional practices and student behaviors that are correlated highly with student learning and student retention. Students are asked to respond to questions based on their entire year's experience at the college so that their responses are reflective of their overall college experience rather than any specific course. For more information, visit www.ccsse.org.

Mean: *the arithmetic average of all responses on a particular item*: Means are provided for San Diego Mesa College and two comparison groups: the Extra-Large Colleges Cohort and the 2007 CCSSE Cohort.

Statistical Significance: the degree to which the difference between two means, CCSSE scores for San Diego Mesa College and its comparison cohort, would occur by chance: A statistical procedure used to compare two means was conducted between San Diego Mesa College and the Extra-Large Colleges Cohort as well as with the 2007 CCSSE Cohort. The mean differences that are significant at the .001 level, i.e., statistically significant differences, are indicated in Table 1 by bold print within shaded cells (see Table 1 on page 2).

Effect Size: the magnitude of the discrepancy between CCSSE scores for San Diego Mesa College and its comparison cohorts: The actual magnitude of some item score differences may seem trivial, even though they are highly reliable and statistically significant. For this reason, CCSSE also considers the effect size associated with those item comparisons that are statistically significant. The mean differences that have an effect size greater than or equal to 0.2, i.e., at least a small effect, are indicated in Table 1 by bold print within shaded cells (see Table 1 on page 2).

RESULTS

The graph in Figure 1: CCSSE Benchmarks for Student Effort (page 2) shows the benchmarks for all CCSSE participants, as well as groups disaggregated by Enrollment Status (part-time v. full-time) and Credits Earned (0-29 and 30+ credits). The standardized benchmarks provide an easy way to assess whether an individual college is performing above or below the national mean (50.0). They also make it possible for colleges to compare their own performance across benchmarks and with groups of similar colleges, which in Mesa's case is the Extra-Large Colleges Cohort.

Table 1: Individual Survey Items for Student Effort Benchmark (see page 2) displays Mesa's mean scores for the survey items constituting the Student Effort benchmark in relation to two comparison cohorts: the Extra-Large Colleges Cohort, which includes 46 institutions, and the 2007 CCSSE Cohort, which is a 3-year cohort of participating colleges (2005-2007) comprising 525 institutions. Means are shown for All Students and are also disaggregated by Enrollment Status and Credits Earned.

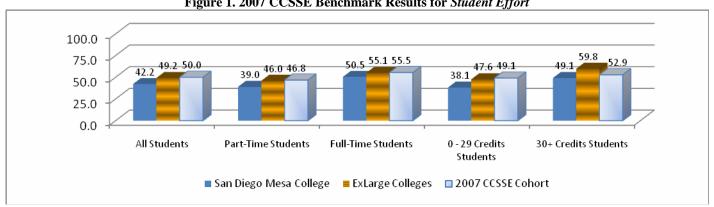


Figure 1. 2007 CCSSE Benchmark Results for Student Effort

Table 1. Individual Survey Items for Student Effort Benchmark

All Students	All Students							
	Mesa College		X-Large Colleges		CCSSE Cohort			
4c. Prepared two or more drafts of a paper or assignment before turning it in. (Scale: 1 = Never, 2 = Sometimes, 3 = Often, 4 = Very often)	2.16		2.46		2.47			
4d. Worked on a paper or project that required integrating ideas or information from various sources. (Scale: 1 = Never, 2 = Sometimes, 3 = Often, 4 = Very often)	2.57		2.69		2.70			
4e. Came to class without completing readings or assignments. (Scale: 1 = Never, 2 = Sometimes, 3 = Often, 4 = Very often)	2.02		1.92		1.88			
6b. Number of books read on your own (not assigned) for personal enjoyment or academic enrichment. (Scale $1=$ none, $2=1$ to 4 , $3=5$ to 10 , $4=11$ to 20 , $5=$ more than 20)	2.05		2.10		2.07			
10a. Preparing for class (studying, reading, writing, rehearsing, doing homework, or other activities related to your program). (Scale $1 = \text{none}$, $2 = 1 \text{ to } 5$, $3 = 6 \text{ to } 10$, $4 = 11 \text{ to } 20$, $5 = 21 \text{ to } 30$, and $6 = \text{more than } 30$)	1.80		1.85		1.88			
13d1. Frequency: Peer or other tutoring. (Scale: 1 = Rarely/Never, 2 = Sometimes, 3 = Often)	1.36		1.47		1.45			
13e1. Frequency: Skill labs (writing, math, etc.). (Scale: 1 = Rarely/Never, 2 = Sometimes, 3 = Often)	1.47		1.69		1.71			
13h1. Frequency: Computer lab. (Scale: 1 = Rarely/Never, 2 = Sometimes, 3 = Often)	1.93		2.04		2.09			
Enrollment Status	Part-Time Studer		ents Fu		ll-Time Students			
	Mesa	X-Large	CCSSE	Mesa	X-Large	CCSSE		
	College	Colleges	Cohort	College	Colleges	Cohort		
4c. Prepared two or more drafts of a paper or assignment before turning it in. (Scale: 1 = Never, 2 = Sometimes, 3 = Often, 4 = Very often)	2.05	2.36	2.36	2.46	2.65	2.64		
4d. Worked on a paper or project that required integrating ideas or information from various sources. (Scale: 1 = Never, 2 = Sometimes, 3 = Often, 4 = Very often)	2.46	2.56	2.54	2.88	2.93	2.92		
4e. Came to class without completing readings or assignments. (Scale: 1 = Never, 2 = Sometimes, 3 = Often, 4 = Very often)	1.98	1.87	1.82	2.13	2.00	1.98		
6b. Number of books read on your own (not assigned) for personal enjoyment or academic enrichment. (Scale $1=$ none, $2=1$ to 4 , $3=5$ to 10 , $4=11$ to 20 , $5=$ more than 20)	2.02	2.11	2.09	2.11	2.11	2.06		
10a. Preparing for class (studying, reading, writing, rehearsing, doing homework, or other activities related to your program). (Scale $1 = \text{none}$, $2 = 1$ to 5 , $3 = 6$ to 10 , $4 = 11$ to 20 , $5 = 21$ to 30 , and $6 = \text{more than } 30$)	1.66	1.73	1.74	2.18	2.09	2.09		
13d1. Frequency: Peer or other tutoring (Scale: 1 = Rarely/Never, 2 = Sometimes, 3 = Often)	1.31	1.44	1.42	1.47	1.53	1.50		
13e1. Frequency: Skill labs (writing, math, etc.) (Scale: 1 = Rarely/Never, 2 = Sometimes, 3 = Often)	1.43	1.65	1.66	1.56	1.76	1.77		
13h1. Frequency: Computer lab (Scale: 1 = Rarely/Never, 2 = Sometimes, 3 = Often)	1.84	1.94	1.97	2.14	2.21	2.24		
Shaded cells with hold print indicate a statistically significant difference between the comparison cohort and San Diego Mesa College (n < 001								

^{*}Shaded cells with bold print indicate a statistically significant difference between the comparison cohort and San Diego Mesa College (p < .001 with an effect size greater than or equal to .2).

Table 1. Individual Survey Items for *Student Effort* Benchmark (continued)

Credits Earned	0 - 29 Credits Students			30+ Credits Students		
	Mesa College	X-Large Colleges	CCSSE Cohort	Mesa College	X-Large Colleges	CCSSE Cohort
4c. Prepared two or more drafts of a paper or assignment before turning it in. (Scale: 1 = Never, 2 = Sometimes, 3 = Often, 4 = Very often)	2.04	2.45	2.47	2.41	2.47	2.48
4d. Worked on a paper or project that required integrating ideas or information from various sources. (Scale: 1 = Never, 2 = Sometimes, 3 = Often, 4 = Very often)	2.46	2.63	2.63	2.81	2.80	2.83
4e. Came to class without completing readings or assignments. (Scale: 1 = Never, 2 = Sometimes, 3 = Often, 4 = Very often)	2.00	1.90	1.86	2.07	1.95	1.93
6b. Number of books read on your own (not assigned) for personal enjoyment or academic enrichment. (Scale 1= none, 2 = 1 to 4, 3 = 5 to 10, 4 = 11 to 20, 5 = more than 20)	1.99	2.08	2.05	2.17	2.14	2.11
10a. Preparing for class (studying, reading, writing, rehearsing, doing homework, or other activities related to your program). (Scale $1 = \text{none}$, $2 = 1$ to 5 , $3 = 6$ to 10 , $4 = 11$ to 20 , $5 = 21$ to 30 , and $6 = \text{more than } 30$)	1.70	1.78	1.81	2.02	1.98	2.03
13d1. Frequency: Peer or other tutoring (Scale: 1 = Rarely/Never, 2 = Sometimes, 3 = Often)	1.29	1.44	1.43	1.47	1.52	1.49
13e1. Frequency: Skill labs (writing, math, etc.) (Scale: 1 = Rarely/Never, 2 = Sometimes, 3 = Often)	1.41	1.68	1.71	1.58	1.70	1.70
13h1. Frequency: Computer lab (Scale: 1 = Rarely/Never, 2 = Sometimes, 3 = Often)	1.84	1.99	2.05	2.10	2.13	2.18
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^{*}Shaded cells with bold print indicate a statistically significant difference between the comparison cohort and San Diego Mesa College (p < .001 with an effect size greater than or equal to .2).

FINDINGS

Statistical Significance and Effect Size

• In all cases of statistically significant differences with effect sizes equal to or greater than .2, San Diego Mesa College scored below the mean in relation to the comparison cohort(s). The only exception is item 4e. Came to class without completing readings or assignments in which part-time Mesa students scored significantly above the mean, meaning that students came to class without having completed readings or assignments more frequently. This item is reverse-coded when incorporated into the Student Effort benchmark.

All Students

• When looking at All Students as an aggregate, San Diego Mesa College scored significantly below the mean (at the .001 level with an effect size >=.2) in three areas: Preparing two or more drafts of a paper or assignment before turning it in, Frequency: Skill labs (writing, math, etc.), and Frequency: Computer lab (when compared with the 2007 CCSSE Cohort only for this last item).

Cohort Comparisons

• San Diego Mesa College scored significantly below the mean (at the .001 level with an effect size >=.2) less frequently when compared with the Extra-Large Colleges Cohort and more frequently when compared with the 2007 CCSSE Cohort. This finding supports the hypothesis that a college's results will be more comparable to like-sized colleges.

Part-Time v. Full-Time Students

• Part-time students scored significantly below the mean on two items: Prepared two or more drafts of a paper or assignment before turning it in and Frequency: Skill labs (writing, math, etc.). Part-time students scored significantly above the mean on one item: Came to class without completing readings or assignments (when compared with the 2007 CCSSE Cohort only), which again means that students came to class without having completed readings or assignments more frequently. Full-time students scored significantly below the mean on one item: Skill labs (writing, math, etc.).

Number of Credits Earned

• Students who earned fewer than 30 units scored significantly below the mean on four items: Prepared two or more drafts of a paper or assignment before turning it in, Frequency: Peer or other tutoring, Frequency: Skill labs (writing, math, etc.), and Frequency: Computer lab (when compared with the 2007 CCSSE Cohort only for this last item). Students who earned 30 or more units scored neither above nor below the mean on any of the items.

RECOMMENDATIONS

Of the five benchmarks, Active & Collaborative Learning, Student Effort, Academic Challenge, Student-Faculty Interaction, and Support for Learners, the onus of responsibility for engagement lies most clearly within the student in the area of Student Effort. The impact of faculty and staff on student engagement seems much clearer for the remaining four benchmarks. However, upon closer examination of the items which constitute the Student Effort benchmark, the potential impact of faculty and staff is sizable and critical to student success. After all, one of Mesa's institution-level Student Learning Outcomes is Personal Actions & Civic Responsibility. We have made it a college-wide goal to educate students about the importance of taking personal responsibility for one's own education. The following good practices are ways in which current Mesa faculty are encouraging the behaviors that constitute the Student Effort benchmark. The Research Committee invites you to try adopting one or more of these practices as you see fit for your course or service area, or create your own innovative ways of encouraging student effort:

- Give tutorial referral codes to students and encourage them to use the Tutorial Centers.
- Invite representatives from the Tutorial Centers to visit your class and present information about the range of services offered.
- Integrate homework portfolios into your curriculum. Better yet, ask students to produce multiple drafts of assignments and revisions to the drafts as part of their portfolios.
- Award extra credit for reading books for pleasure.
- Use rubrics to create a shared and transparent assessment process for instructors and students.
- Refer students to the Transfer Center.
- Incorporate the use of journals in your curriculum, including in-class journal writing.
- Hold students accountable to each other and create the incentive of peer encouragement by including group work or cooperative learning in your classroom activities.
- Encourage students to come to your office hours or schedule appointments for advising/counseling.

NEXT STEPS

Information from this third issue, Research Brief #3: Student Effort, will be shared and discussed at student venues, such as the Associated Student Government, clubs, and other organizations. Focus groups will be conducted with students, faculty, and staff to discuss the results of the Student Effort benchmark and strategize possible solutions.

Research Briefs are a monthly publication of the San Diego Mesa College Research Committee. Its intended readership comprises the entire campus community, and its intended purpose is to facilitate greater campus consideration, discussion, and application of all-things-data.

San Diego Mesa College Research Committee

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