

**Measurement and Research Services
Texas A&M University****Mark Troy, Associate Director
Wendy Olson, Research Assistant****Student Engagement in Communication****National Survey of Student Engagement**

The National Survey of Student Engagement (NSSE) is a nationally-normed college student survey that assesses the extent to which students engage in particular educational practices that are associated with high levels of learning and development. Pascarella and Terrenzini (2005) report that the impact of college is largely determined by individual effort. Students are not passive recipients of institutional efforts to “educate” or “change” them. Rather, they are engaged with the institution and their learning in varying degrees. Thus it is important to focus on ways in which an institution can shape its academic, interpersonal, and extracurricular offerings to encourage student engagement. Texas A&M administered the NSSE in 2001, 2002, 2003 and 2005 to a sample of freshman and seniors in each of those years.

Task Force on Undergraduate Excellence

Task Force for Enhancing the Undergraduate Experience. (2005). *Final Report* declares that:

Texas A&M University is a scholarly community that emphasizes academic rigor and inquiry, encourages involvement in the life of the institution beyond the classroom, instills an appreciation of the arts and sciences, integrates learning and leadership, fosters an environment of caring and concern, promotes success and leadership development for all students and encourages engagement in life-long learning.

The Task force identified, as one of the characteristics of undergraduate excellence, the achievement of learning outcomes, regardless of discipline, through a broad education in the arts and sciences, including opportunities to develop communication skills (writing and speaking). In this report we will summarize responses to the communication questions on the NSSE and compare them with responses from other public research universities.

AAUDE Benchmarks.

The Association of American Universities Data Exchange (AAUDE) is an organization of institutions of higher education aimed at improving the quality of assessment data relevant to higher education. Besides collecting the data, the AAUDE serves as a clearinghouse for the data of member institutions, one of which is Texas A&M. The

AAUDE has collected the National Survey of Student Engagement (NSSE) from member institutions who administer the NSSE each spring since 2000. The NSSE dataset maintained by the AAUDE contains responses from students from twenty-six public institutions of higher education.

The 26 AAUDE Institutions

Arizona, Colorado, **Florida**, **Illinois**, Indiana, Iowa, Iowa St, Kansas, Maryland, **Michigan**, Michigan St, Missouri, **N Carolina**, Nebraska, **Ohio St**, Oregon, **Penn St**, Pittsburgh, **Purdue**, SUNY-Buffalo, SUNY-Stony Brook, **Texas**, Texas A&M, Virginia, Washington, Wisconsin. Institutions in bold are Vision 20/20 comparison universities.

To obtain a benchmark against which we could compare the Texas A&M NSSE 2005 results, we obtained the mean score on each NSSE question over all AAUDE institutions for all five years from 2000 to 2005. Thus, a mean of 1.96 for freshmen on the question, "Asked questions in class or contributed to class discussions," is the mean of all freshmen in the 26 institutions for all five years combined. The benchmark means were subtracted from the 2005 TAMU NSSE means. The difference was divided by the standard deviation of the benchmark mean to obtain an effect size which we report as the benchmark score. The benchmark scores indicate the direction of difference. A score of zero occurs if the TAMU mean is identical to the benchmark mean. A negative benchmark score indicates that TAMU was lower than the benchmark. An effect size of .2 is generally considered small, .5 is medium and .8 large. TAMU and AAUDE means and benchmark scores are presented in Table 2.

Results

Figures 1 and 2, plot the benchmark scores of Freshmen and Seniors, respectively, for eleven NSSE questions listed in Table 1. The zero point on the y-axis, through which the heavy center line runs, represents the mean of all AAUDE universities from which the TAMU 2005 mean is deviated. As can be seen from Figure 1, Texas A&M's Freshman scores on WRITEMID, WRITESML, CLPRESEN and CLQUEST have moderate, negative effect sizes. Departures of that magnitude probably merit attention by the university community. The scores for Seniors, as shown in Figure 2., present a better picture. With the exception of WRITEMID all of the scores are close to those of the AAUDE Benchmark Universities.

NSSE results over the past five years have found greater variability within institutions than between institutions. Therefore, we also calculated the benchmark scores for each TAMU college on these questions and plotted the highest and lowest college benchmark scores as max and min respectively in Figures 1 and 2. Means of each question by college are presented in Tables 3 and 4.

Pascarella and Terrenzini (2005). *How college affects students: A third decade of research*. Jossey-Bass; 2Rev Ed edition

Table 1 NSSE questions relating to communication skills

Question	Code
Asked questions in class or contributed to class discussions	CLQUEST
Made a class presentation	CLPRESEN
Prepared two or more drafts of a paper or assignment before turning it in	REWROPAP
Worked on a paper or project that required integrating ideas or information from various sources	INTEGRAT
Number of written papers or reports of 20 pages or more	WRITEMOR
Number of written papers or reports between 5 and 19 pages	WRITEMID
Number of written papers or reports of fewer than 5 pages	WRITESML
Used an electronic medium (listserv, chat group, Internet, instant messaging, etc.) to discuss or complete an assignment	ITACADEM
Used e-mail to communicate with an instructor	EMAIL
Writing clearly and effectively (outcome)	GNWRITE
Speaking clearly and effectively (outcome)	GNSPEAK

Figure 1. Freshmen Engagement in Communication Skills Compared to AAUDE Benchmark Universities

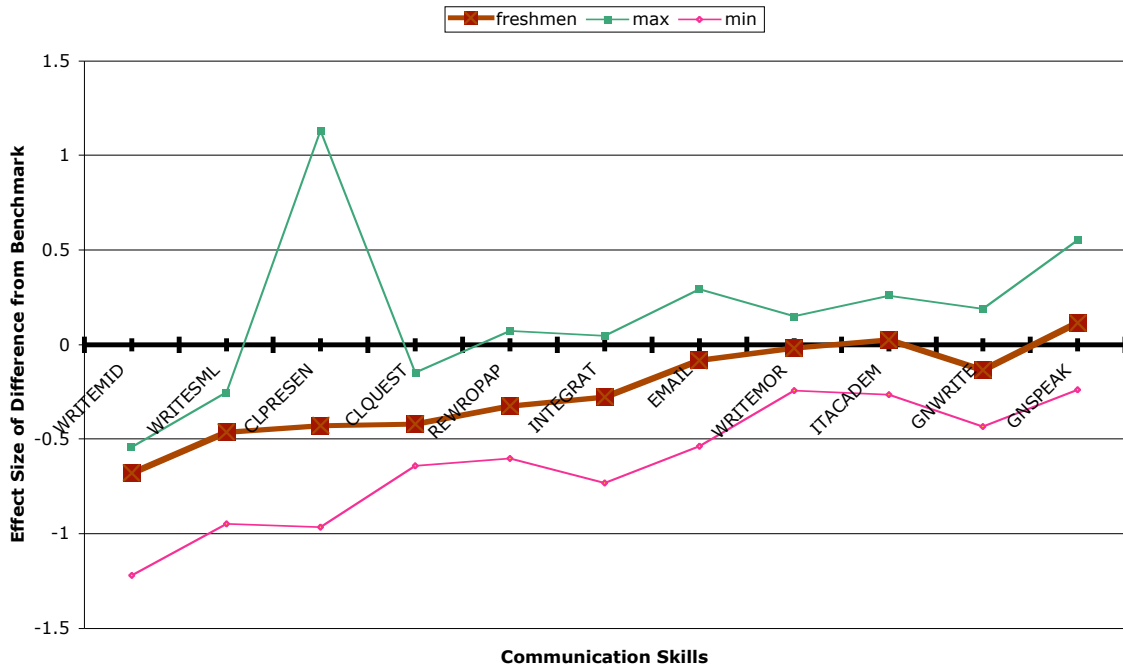


Figure 2. Senior Engagement in Communication Skills Compared to AAUDE Benchmark Universities

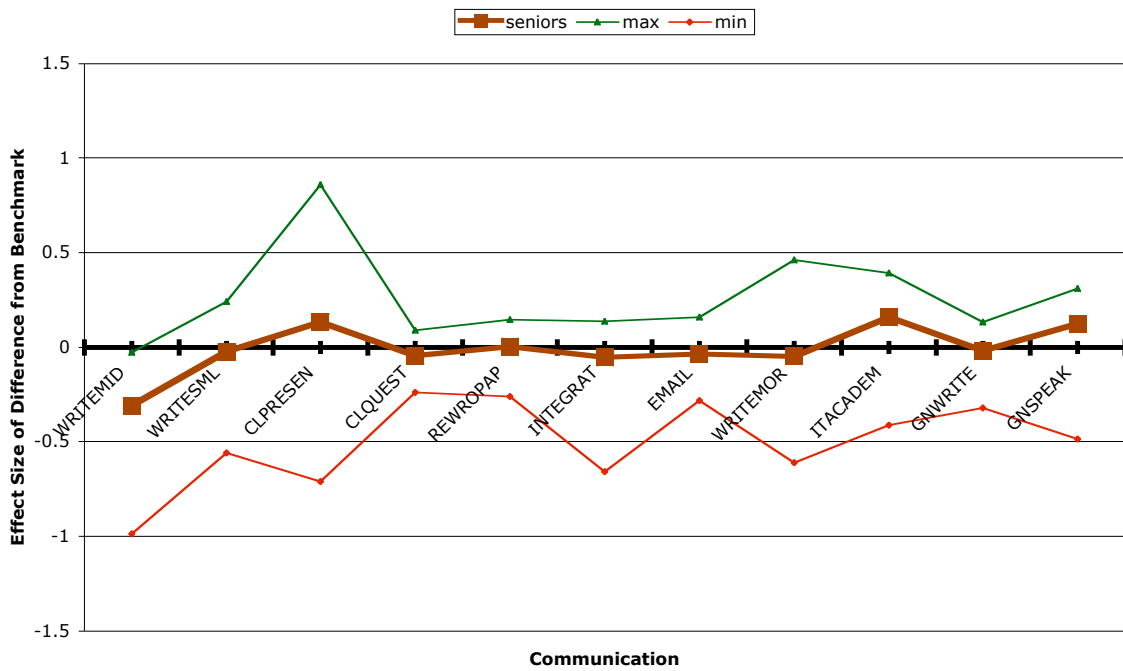


Table 2. Means, Standard Deviations and Effect Sizes (Benchmark scores) for TAMU and AAUDE on Communication skills

	TAMU mean		AAUDE mean		AAUDE Std. Dev.		Effect size	
	Fr	Sr	Fr	Sr	Fr	Sr	Fr	Sr
	CLPRESEN	1.65	2.63	1.96	2.52	0.73	0.84	-0.428
CLQUEST	2.24	2.77	2.58	2.81	0.82	0.88	-0.419	-0.046
WRITEMID	1.74	2.29	2.33	2.59	0.87	0.96	-0.678	-0.310
WRITEMOR	1.17	1.56	1.18	1.60	0.53	0.75	-0.020	-0.048
WRITESML	2.56	3.03	3.05	3.06	1.05	1.14	-0.462	-0.024
INTEGRAT	2.66	3.16	2.89	3.20	0.84	0.78	-0.278	-0.054
REWROPAP	2.16	2.32	2.49	2.32	1.01	0.98	-0.324	0.005
EMAIL	3.02	3.31	3.09	3.34	0.82	0.77	-0.084	-0.035
ITACADEM	2.71	2.93	2.68	2.77	1.03	1.02	0.026	0.158
GNSPEAK	2.52	2.88	2.41	2.77	0.93	0.90	0.115	0.123
GNWRITE	2.58	2.91	2.70	2.93	0.90	0.86	-0.134	-0.018

Table 3. First-year Means by College. The highest mean on each question is highlighted in green and the lowest mean is highlighted in orange. The highest and lowest means are plotted in Fig. 1.

First year	AG	AR	BA	ED	EN	GE	GS	LA	SC	VM	Total
CLQUEST	2.32	2.43	2.06	2.23	2.32	2.30	2.12	2.46	2.34	2.11	2.24
CLPRESEN	1.79	2.78	1.47	2.15	1.58	1.60	1.73	1.73	1.36	1.26	1.65
REWROPAP	2.20	2.39	1.89	2.56	2.02	2.00	2.33	2.26	2.07	1.88	2.16
INTEGRAT	2.70	2.87	2.28	2.90	2.73	2.40	2.72	2.93	2.50	2.38	2.66
WRITEMOR	1.23	1.05	1.11	1.11	1.16	1.24	1.21	1.26	1.09	1.10	1.17
WRITEMID	1.86	1.27	1.50	1.77	1.75	1.65	1.82	1.86	1.73	1.65	1.74
WRITESML	2.60	2.05	2.28	2.53	2.78	2.29	2.52	2.71	2.73	2.30	2.56
ITACADEM	2.72	2.43	2.70	2.78	2.95	2.41	2.53	2.69	2.75	2.81	2.71
EMAIL	3.16	2.65	3.04	3.33	2.91	3.00	2.94	3.19	2.95	3.11	3.02
GNWRITE	2.54	2.33	2.43	2.85	2.31	2.38	2.76	2.88	2.51	2.44	2.58
GNSPEAK	2.51	2.52	2.48	2.93	2.22	2.19	2.68	2.77	2.37	2.34	2.52

Table 4. Senior Means by College. The highest mean on each question is highlighted in green and the lowest mean is highlighted in orange. The highest and lowest means are plotted in Fig2.

Senior	AG	AR	BA	ED	EN	GE	LA	SC	VM	Total
CLQUEST	2.68	2.60	2.89	2.86	2.78	2.76	2.80	2.66	2.62	2.77
CLPRESEN	2.63	2.72	2.85	3.24	2.63	2.29	2.37	2.06	1.92	2.63
REWROPAP	2.35	2.45	2.21	2.46	2.37	2.18	2.28	2.06	2.30	2.32
INTEGRAT	3.15	3.13	3.04	3.31	3.26	3.18	3.28	2.69	2.78	3.16
WRITEMOR	1.48	1.29	1.66	1.36	1.94	1.19	1.55	1.34	1.14	1.56
WRITEMID	2.24	1.98	2.14	2.18	2.56	2.06	2.46	2.25	1.64	2.29
WRITESML	2.91	3.00	2.97	3.33	3.11	2.75	3.11	2.78	2.42	3.03
ITACADEM	2.82	2.76	3.17	3.02	3.00	2.35	2.86	2.96	2.72	2.93
EMAIL	3.37	3.17	3.41	3.46	3.18	3.18	3.32	3.31	3.12	3.31
GNWRITE	2.91	2.84	2.75	3.02	2.93	2.67	3.04	2.69	2.65	2.91
GNSPEAK	2.95	2.95	2.99	3.05	2.89	2.33	2.84	2.56	2.51	2.88