



August 2, 2005

**MEMORANDUM**

To: Interested Colleagues

From: Margaret Harrigan

Subject: Analysis of 2004 National Survey of Student Engagement for UW-Madison Seniors by School and College

Copy: Jocelyn Milner

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This analysis examines the responses of undergraduate seniors enrolled at UW-Madison in spring semester 2004 who completed the National Survey of Student Engagement (NSSE). NSSE is a national survey of college freshmen and seniors designed to assess student involvement in practices associated with high levels of learning. A random sampling methodology was employed to select 3700 seniors at UW-Madison to receive the NSSE survey. Approximately 33 percent of students included in the sample completed the survey.

In order to have enough sample cases to make reliable statistical estimates, some categories of senior students – those from smaller UW-Madison schools and colleges and students of color – were sampled at a higher rate. Responses are weighted in the analysis to account for over-sampling and differential response rates.

Responses for students whose administrative records show they were enrolled in Agricultural and Life Sciences, Business, Education, Engineering, Human Ecology, Letters and Science, and Nursing are compared in the attached tables. Students in Pharmacy and Medicine are included in the responses for all seniors but are not shown separately because of the small number of respondents. Overall, significant differences were observed between the responses of students in the different schools and colleges. A few of the more noteworthy differences are summarized below.

*Agricultural and Life Sciences*

- As seniors, CALS students more often complete a practicum or internship, participate in community service or volunteer projects, and take independent study courses
- CALS students are more likely to work on a research project with a faculty member and more likely to complete or plan to complete a senior project
- Seniors in CALS are more likely to report their education contributed quite a bit to their skills in analyzing quantitative problems (80%), and using information technology (82%)
- Students in CALS are less likely to include diverse perspectives in class discussions or assignments (36%), less likely to tutor others, and more likely to put together ideas from different courses when completing assignments (72%)
- CALS students are less likely to be transfer students, more likely to spend over 5 hours a week commuting to class and more likely to spend time caring for dependents (19%)
- CALS seniors report more emphasis on memorizing facts than other UW students do, report fewer book-length reading assignments and more problem sets

*Business*

- Business students are more satisfied than other UW students – with their entire educational experience, the quality of the university and of the major, with academic advising, and are more likely to report that if they had to do it over, they would attend UW again (94%)
- As seniors, Business students more often ask questions in class, make a class presentation (63%), work with others on projects outside of class (88%), and apply theories or concepts to practical problems or new situations
- Seniors in Business are more likely to report their education contributed quite a bit to writing (81%) and speaking (79%) clearly and effectively, acquiring job-related skills, analyzing quantitative problems (81%), solving real-world problems (67%), and working effectively with others (92%)
- Business students read more book-length assignments, are more likely to write a paper over 20 pages, and are more likely to complete problem sets than other UW students
- More Business students complete a practicum or internship and study abroad; they are less likely to work on a research project with faculty or take independent study courses
- Business school students report that the university places much emphasis on providing the support you need to succeed academically (70%), attending campus events and activities (72%), and using computers in academic work
- Students in Business are more likely to participate in co-curricular activities, spend more time relaxing and socializing, and less likely to spend time caring for dependents
- Business students are less likely to be older, transfer students, or enrolled part-time

*Education*

- Education students are less likely to work on a research project with a faculty member (15%) and less likely to complete a senior project (13%)
- More Education seniors are female (76%) and fewer are international (1%)
- Seniors in Education are less likely to report their education has contributed greatly to their ability to analyze quantitative problems (48%), and more likely to report it has greatly contributed to acquiring job-related skills (73%) and to understanding people of diverse backgrounds (57%)
- Education students more often complete a practicum or internship, participate in community service or volunteer projects, and participate in a learning community (organized program where students take 2+ classes together)
- As seniors, Education students more often make a class presentation (66%), ask questions in class, work with others on projects during class (51%), tutor other students, and include diverse perspectives in class discussions or assignments (71%)
- Education seniors are more likely to report discussing grades with an instructor and receiving prompt feedback from instructors
- Compared to other students, Education students are less likely to participate in co-curricular activities (51%), more likely to attend a performance or art exhibit, spend more time commuting to class, and are more likely to work (91%), especially off campus

*Engineering*

- Engineering seniors are more likely to be international, male, full-time, and have started their academic career at UW than other UW students
- Engineering students are less likely to talk to faculty or advisors about career plans, to receive prompt feedback from faculty, to rate relationships with faculty highly (69%)
- Engineering seniors are less likely to ask questions in class (49%), write multiple drafts of papers (30%), include diverse perspectives (different races, political beliefs, etc.) in class discussions or assignments (24%) than are other UW students
- They are more likely to work with classmates outside of class on assignments (79%), tutor others, apply theories or concepts to practical problems or new situations (91%)
- Engineering students are more likely to report their education contributed quite a bit to thinking critically and analytically, acquiring job-related skills, analyzing quantitative problems, solving real-world problems, and working effectively with others; Engineers were less likely to report it contributed to understanding people of different racial or ethnic backgrounds
- Although they are not different from other students in the proportion who have already completed these activities, more engineers report they plan to work on a research project (22%), complete an internship (28%), and complete a senior project (34%)
- Students in Engineering are less likely to participate in community service or volunteer projects
- Engineering students spend more time preparing for class (78% spend 11 or more hours per week) and participating in co-curricular activities (such as student organizations) and less time working for pay (60% hold a job) than students in other schools and colleges

*Human Ecology*

- Human Ecology students are more likely to complete a practicum or internship but less likely to study a foreign language or tutor other students
- As seniors, Human Ecology students more often make a class presentation (66%), work with others on projects both in class (49%) and outside of class (73%), and participate in community service or volunteer work (79%)
- Human Ecology seniors are more likely to work with faculty on activities other than coursework (22%) but less likely to work with faculty on a research project (16%)
- More Human Ecology students reported their education contributed quite a bit to writing clearly and effectively, acquiring job-related skills, working effectively with others, and working on their own; they were less likely to report their education contributed to their skills in analyzing quantitative problems
- More Human Ecology students rate their relationships with other students highly
- Seniors in Human Ecology are least likely to report spending 11 or more hours per week preparing for class (48%)
- Students in Human Ecology are more likely to be female, members of a fraternity or sorority (14%), and less likely to be foreign students

*Letters and Science*

- As seniors, L & S students less often make a class presentation (24%) or work with others on projects during class (23%) or outside of class (41%)
- L& S students are more likely than other UW students to study abroad and study a foreign language
- They are less likely to complete a practicum or internship, participate in community service or volunteer projects, or participate in a learning community (organized program where students take 2+ classes together)
- L & S students are less satisfied than other UW students with academic advising and with their entire educational experience in general, less likely to rate their relationships to other students as high quality, and less likely to report that the university places much emphasis on helping them succeed academically or help them cope with their non-academic responsibilities
- Compared to other students, L & S seniors are less likely to report their education has contributed to acquiring job-related skills, analyzing quantitative problems (62%), solving real-world complex problems (50%), or working effectively with others (65%)
- Seniors in L & S are more likely to attend a performance or art exhibit and more likely to work for pay, especially on campus
- L & S seniors are more likely to be minority, transfer, and part-time than are other UW students

*Nursing*

- Like Education students, Nursing students more often complete a practicum or internship (79%), participate in community service or volunteer projects (81%), and participate in an organized program where students take 2+ classes together (36%)
- Nursing students are less likely to complete a senior project (13%), less likely to tutor others, less likely to make a presentation during class (19%), and less likely to have serious conversations with students of a different race or ethnicity than their own
- Seniors in Nursing are more likely to report their education contributed quite a bit to acquiring job-related skills, thinking critically and analytically (96%), solving real-world problems, and contributing to the welfare of the community (70%); they were less likely to report their education contributed to their skills in analyzing quantitative problems
- More Nursing students report that UW emphasizes spending significant time on academic work (95%)
- 90% of Nursing students report working on a paper that required integrating ideas or information from various sources; 79% reported putting together ideas from different courses when completing assignments
- Nursing students are less likely to report completing problem sets or lengthy papers and more likely to report writing papers of 5 pages or less
- Nursing students are more likely to use an electronic medium (such as listserv) to discuss or complete an assignment and more likely to use e-mail to contact instructors
- Coursework for Nursing students is more likely to emphasize memorizing facts, synthesizing and organizing ideas, and applying theories and concepts to practical problems or new situations
- Nursing students are more likely to be female (93%), older (33%), less likely to be minority (4%) , more likely to be transfer students (39%), less likely that both parents graduated from college (26%), more likely to work for pay, especially off campus, and more likely to care for dependents

Attachment

## National Survey of Student Engagement 2004 Results for UW-Madison Seniors by School or College

**Table A.1 Demographics of Respondents**

<b>Percent of Students:</b>	<b>All Seniors</b>	<b>CALS</b>	<b>Business</b>	<b>Education</b>	<b>Engineering</b>	<b>Human Ecology</b>	<b>Letters &amp; Science</b>	<b>Nursing</b>
Maximum number of respondents (unweighted)	1160	151	162	147	189	120	325	49
Proportion of seniors by school or college (weighted)	100	8.5	8.7	10.4	12.9	4.7	51.4	2.2
Age 23 or younger	86	87	97	86	92	88	85	67
Female	52	55	49	76	18	77	52	93
Minority (Black, Asian American, Hispanic, American Indian)	9	8	8	7	8	7	10	4
International student or foreign national	7	7	9	1	13	3	6	2
Transfer student	26	19	13	23	19	27	30	39
Also attended vocational-technical school	7	4	1	7	3	9	10	19
Also attended community or junior college	11	9	9	6	10	9	12	26
Also attended four-year college	23	17	17	22	19	24	24	41
Enrolled full-time	88	89	95	89	93	91	86	89
Member of a social fraternity or sorority	7	8	10	7	7	14	6	2
Student-athlete on a team sponsored by UW	3	4	2	2	2	3	3	5
Live in a dormitory or campus housing	4	2	1	2	5	4	4	2
Live within walking distance (not residence hall, frat, sorority)	76	74	88	73	75	70	77	61
Mother did not attend college	21	20	21	24	23	25	20	24
Neither mother nor father attended college	11	10	9	14	12	14	10	11
Both mother and father graduated from 4-year college	45	49	51	47	47	40	45	26

See notes at end of tables.

## National Survey of Student Engagement 2004 Results for UW-Madison Seniors by School or College

**Table A.2 Student Satisfaction**

<b>Percent of Students agreeing:</b>	<b>All Seniors</b>	<b>CALS</b>	<b>Business</b>	<b>Education</b>	<b>Engineering</b>	<b>Human Ecology</b>	<b>Letters &amp; Science</b>	<b>Nursing</b>
Entire educational experience at this institution is good or excellent	90	92	96	93	91	92	87	91
Probably or definitely would attend UW if you could start over again	88	87	94	88	92	90	86	94
Quality of academic advising you have received at your institution is good or excellent	58	55	71	64	60	57	54	50
Academic quality of this university in general is good or excellent	95	93	99	94	93	96	95	100
Academic quality of your major program is good or excellent	88	90	93	85	92	86	87	96

**Table A.3 Class-Related Activities**

<b>In current year, percent of students who often or very often:</b>	<b>All Seniors</b>	<b>CALS</b>	<b>Business</b>	<b>Education</b>	<b>Engineering</b>	<b>Human Ecology</b>	<b>Letters &amp; Science</b>	<b>Nursing</b>
Asked questions in class or contributed to class discussions	60	54	71	70	49	57	61	57
Made a class presentation	36	32	63	66	36	66	24	19
Prepared 2+ drafts of a paper or assignment before turning it in	39	41	44	36	30	42	41	33
Worked on a paper or project that required integrating ideas or information from various sources	81	82	84	85	76	90	80	90
Included diverse perspectives (different races, religions, genders, political beliefs, etc.) in class discussions or assignments	54	36	47	71	24	59	61	62
Come to class without completing readings or assignments	34	31	33	32	33	37	35	33
Worked with other students on projects during class	32	38	36	51	38	49	23	26
Worked with classmates outside of class to prepare class assignments	56	62	88	59	79	73	41	61
Put together ideas or concepts from different courses when completing assignments or during class discussions	65	72	74	60	72	70	61	79
Tutored or taught other students (paid or voluntary)	19	11	14	31	28	8	18	6
Participated in a community-based project (e.g., service learning) as part of a regular course	15	9	13	31	9	42	10	53

## National Survey of Student Engagement 2004 Results for UW-Madison Seniors by School or College

**Table A.3 Class-Related Activities (continued)**

<b>In current year, percent of students who often or very often:</b>	<b>All Seniors</b>	<b>CALS</b>	<b>Business</b>	<b>Education</b>	<b>Engineering</b>	<b>Human Ecology</b>	<b>Letters &amp; Science</b>	<b>Nursing</b>
Used an electronic medium (listserv, chat group, Internet, instant messaging, etc.) to discuss or complete an assignment	53	55	56	50	63	53	49	67
Used e-mail to communicate with an instructor	83	85	88	80	84	86	83	96
Discussed grades or assignments with an instructor	49	46	53	56	48	56	46	49
Talked about career plans with a faculty member or advisor	32	38	41	35	25	39	29	45
Discussed ideas from your readings or classes with faculty members outside of class	16	16	17	12	17	13	18	14
Received prompt feedback from faculty on your academic performance (written or oral)	58	60	64	69	42	61	57	62
Worked harder than you thought you could to meet an instructor's standards or expectations	44	40	47	43	49	52	42	56
Worked with faculty members on activities other than coursework (committees, orientation, student life activities, etc.)	14	16	17	11	14	22	14	13
Discussed ideas from your readings or classes with others outside of class (students, family members, co-workers)	64	67	59	63	55	62	67	73
Had serious conversations with students of a different race or ethnicity than your own	51	51	55	57	53	43	51	38
Had serious conversations with students who are very different from you in terms of religious beliefs, political opinions, or personal values	62	63	65	63	57	59	63	58



## National Survey of Student Engagement 2004 Results for UW-Madison Seniors by School or College

**Table A.4 Coursework Emphasis**

Percent who reported item was emphasized "quite a bit" or "very much" in current courses:	All Seniors	CALS	Business	Education	Engineering	Human Ecology	Letters & Science	Nursing
Making judgments about information, arguments, or methods, e.g., examining how others gathered/ interpreted data and assessing the soundness of their conclusions	69	70	66	69	64	69	69	77
Memorizing facts, ideas, or methods from your courses and readings so you can repeat them in the same form	57	74	62	45	40	53	58	79
Analyzing basic elements of a theory, examining a particular case in depth & considering its components	86	81	89	81	90	81	87	91
Synthesizing and organizing ideas, information, or experiences into new, more complex interpretations and relationships	72	70	73	77	75	74	70	86
Applying theories or concepts to practical problems or in new situations	78	80	89	77	91	83	72	92
On a scale of 1 to 7, rate the extent to which exams during the current school year challenged you to do your best work.	81	77	85	71	87	85	81	85

Note: "Exams challenged you to do your best" is defined here as a score of 5 or more on a scale of 1 to 7, where 7 is greatest challenge.

## National Survey of Student Engagement 2004 Results for UW-Madison Seniors by School or College

**Table A.5 Reading and Writing**

<b>During the current year, percent of students:</b>	<b>All Seniors</b>	<b>CALS</b>	<b>Business</b>	<b>Education</b>	<b>Engineering</b>	<b>Human Ecology</b>	<b>Letters &amp; Science</b>	<b>Nursing</b>
Five or more assigned textbooks, books, or book-length packs of course readings	81	74	88	78	64	76	87	76
Five or more books read on your own (not assigned) for personal enjoyment or academic enrichment	26	33	23	28	23	21	27	19
Wrote any papers or reports of 20 pages or more	49	51	63	49	58	42	47	28
Wrote 5 or more papers between 5 and 19 pages	49	38	41	54	39	55	56	30
Wrote 5 or more papers or reports of fewer than 5 pages	62	68	65	75	55	77	58	81

**Table A.6 Homework Problem Sets Completed per Week**

<b>Percent of students completing problem sets:</b>	<b>All Seniors</b>	<b>CALS</b>	<b>Business</b>	<b>Education</b>	<b>Engineering</b>	<b>Human Ecology</b>	<b>Letters &amp; Science</b>	<b>Nursing</b>
<b>Problem sets taking more than 1 hour to complete:</b>								
None	31	23	23	48	3	36	36	51
1-2 per week	33	48	36	28	24	35	34	21
3 or more per week	36	29	41	24	73	29	30	28
<b>Problem sets taking less than 1 hour to complete:</b>								
None	45	35	30	50	51	41	46	59
1-2 per week	32	46	42	26	35	30	30	17
3 or more per week	23	19	28	24	14	29	24	24

## National Survey of Student Engagement 2004 Results for UW-Madison Seniors by School or College

**Table A.7 Enriching Educational Experiences**

Percent of students:	All Seniors	CALS	Business	Education	Engineering	Human Ecology	Letters & Science	Nursing
Practicum, internship, field experience, co-op experience, or clinical assignment								
Planned to do	17	16	15	13	28	20	15	21
Done	54	63	62	77	51	73	44	79
Community service or volunteer work								
Planned to do	11	11	8	11	15	8	11	11
Done	61	70	66	73	49	79	57	81
Participate in learning community or other formal program where groups of students take 2 or more classes together								
Planned to do	2	3	2	2	1	1	2	10
Done	17	18	11	50	19	24	9	36
Work on a research project with a faculty member outside of course or program requirements								
Planned to do	10	8	9	5	22	6	9	11
Done	25	46	12	15	25	16	28	17
Foreign language coursework								
Planned to do	4	4	4	4	7	2	3	4
Done	65	50	68	60	39	52	75	68
Study abroad								
Planned to do	5	4	4	8	10	4	4	2
Done	21	17	33	17	9	17	24	17
Independent study or self-designed major								
Planned to do	8	8	4	9	12	4	9	4
Done	24	41	12	20	25	31	24	17
Culminating senior experience (comprehensive exam, capstone course, thesis, project, etc.)								
Planned to do	19	31	15	20	34	7	15	30
Done	28	55	25	13	34	23	27	13

## National Survey of Student Engagement 2004 Results for UW-Madison Seniors by School or College

**Table A.8 Supportive Campus Environment**

Percent of students rating relationships as high quality:	All Seniors	CALS	Business	Education	Engineering	Human Ecology	Letters & Science	Nursing
Other Students	82	82	86	88	87	89	78	85
Faculty Members	78	84	75	84	69	84	79	79
Administrative Personnel and Offices	58	60	61	55	65	52	56	55

Note: "High quality" is defined here as a score of 5 or more on a scale of 1 to 7, where 7 is highest quality.

**Table A.9 Student Time Use**

Percent of students spending time:	All Seniors	CALS	Business	Education	Engineering	Human Ecology	Letters & Science	Nursing
Preparing for class (studying, reading, writing, doing homework or lab work, analyzing data, rehearsing, and other academic activities) (11 or more hrs per week)	62	63	59	60	78	48	60	63
Working for pay on campus	47	48	44	46	41	41	50	31
Working for pay off campus	43	42	39	62	24	54	43	63
Employed either on or off campus	79	80	73	91	60	80	82	91
Participating in co-curricular activities (organizations, campus publications, student government, fraternity or sorority, intercollegiate or intramural sports, etc.)	64	59	80	51	77	62	62	55
Relaxing and socializing (watching TV, partying, exercising, etc.) 11 or more hours per week	52	51	62	45	46	60	54	41
Providing care for dependents living with you	12	19	7	13	10	11	11	28
Commuting to class (more than 5 hours per week)	25	35	16	33	21	20	25	28

## National Survey of Student Engagement 2004 Results for UW-Madison Seniors by School or College

**Table A.10 Arts, Wellness, and Spirituality**

In current year, percent of Students who often or very often:	All Seniors	CALS	Business	Education	Engineering	Human Ecology	Letters & Science	Nursing
Attended art exhibit, gallery, play, dance, or other performance	19	16	13	27	7	16	22	8
Exercised or participated in physical fitness activities	61	60	74	64	64	59	57	72
Participated in activities to enhance your spirituality (worship, meditation, prayer, etc.)	19	23	23	19	20	19	17	37

**Table A.11 Areas of Institutional Emphasis**

Percent of students who report quite a bit or very much emphasis:	All Seniors	CALS	Business	Education	Engineering	Human Ecology	Letters & Science	Nursing
Spending significant time studying and on academic work	83	81	79	83	91	84	82	95
Providing support you need to help you succeed academically	61	62	70	62	64	67	57	63
Encouraging contact among students from different economic, social, and racial or ethnic backgrounds	33	32	37	38	32	30	31	33
Helping you cope with your non-academic responsibilities (work, family, etc.)	12	15	18	10	17	13	10	13
Providing the support you need to thrive socially	31	29	38	28	34	39	30	28
Attending campus events and activities (special speakers, cultural performances, athletic events, etc.)	62	59	72	63	54	68	63	57
Using computers in academic work	93	90	98	93	96	88	93	91

## National Survey of Student Engagement 2004 Results for UW-Madison Seniors by School or College

**Table A.12 Educational and Personal Growth**

Percent of students whose education has contributed quite a bit or very much to:	All Seniors	CALS	Business	Education	Engineering	Human Ecology	Letters & Science	Nursing
Acquiring a broad general education	87	87	97	88	71	91	89	83
Acquiring job or work-related knowledge and skills	65	71	84	73	84	78	52	94
Writing clearly and effectively	75	79	81	73	69	82	75	72
Speaking clearly and effectively	63	61	79	62	64	69	60	54
Thinking critically and analytically	90	90	88	91	94	91	89	96
Analyzing quantitative problems	68	80	81	48	97	60	62	54
Using computing and information technology	76	82	88	72	95	84	68	72
Working effectively with others	74	77	92	75	89	89	65	78
Learning effectively on your own	81	80	78	79	84	91	80	81
Understanding yourself	67	68	69	69	66	76	66	74
Understanding people of other racial and ethnic backgrounds	46	44	47	57	39	51	45	57
Solving complex real-world problems	58	55	67	58	78	59	50	72
Developing a personal code of values and ethics	50	48	56	49	46	63	48	72
Contributing to the welfare of your community	38	35	40	43	30	56	37	70
Developing a deepened sense of spirituality	13	16	17	9	18	18	11	24
Voting in local, state, or national elections	37	39	35	35	23	45	42	35

**NOTES:**  
 The National Survey of Student Engagement (NSSE) is a national survey of college freshmen and seniors administered by Indiana University Center for Postsecondary Research. A detailed description of NSSE is available on-line at <http://www.indiana.edu/~nsse>. This analysis includes 1160 seniors who were enrolled at UW-Madison in Fall 2003 and completed a web survey in spring 2004. Minority students and students from smaller schools and colleges were surveyed at a higher rate to permit separate analyses of these groups. UW-Madison survey responses are weighted to reflect the distribution of senior students enrolled in fall 2003.

All Seniors includes 17 students enrolled in the School of Medicine or School of Pharmacy who completed the survey. Because of the limited number of respondents, these schools are not shown separately.

Shaded areas indicate that the difference in responses between the groups (e.g., between Business students and seniors in all other UW-Madison schools and colleges) is statistically significant at the 95% confidence level (two-tailed test). The darker (blue) shading indicates that the response occurs significantly less frequently in this school/college; the lighter (tan) shading indicates the response occurs significantly more frequently in this college or school.