

**Report of the *ad hoc* committee examining the results of the National Survey of Student Engagement (NSSE) and the Faculty Survey of Student Engagement (FSSE) 11/7/03**

Over the past three years, a sample of students from the University of Wisconsin-Whitewater have taken in the NSSE. In addition during 2002-2003, faculty and instructional academic staff participated in the FSSE.

In the spring, the Faculty Senate asked that a small task force be established to look at the results of these surveys and to report back to the Faculty Senate in the fall.

The committee examined the NSSE results for 2000-2001, 2001-2002, and 2002-2003 as well as the results for the FSSE in 2002-2003. Although a number of comparisons were possible, the committee concentrated on comparisons of UWW with national norms and with other public master's degree institutions, comparisons of our freshmen and our seniors, and comparisons of the results on the NSSE with results on the FSSE.

The group has highlighted three themes in the data. The first relates to **Diversity**. While in some areas we are similar to peer institutions, the growth of our students in understanding of diversity and the involvement of our students with others from diverse backgrounds may be an area of concern. The second theme relates to **Expectations**. The perception is that expectations of students at UWW are lower than at our peer institutions. It also appears that faculty and student have different perceptions of what is expected. The third theme relates to **Mental Activities**. While in some ways similar to the responses from peer institutions, it appears that the UWW students report their coursework emphasizing higher level skills less often than do students at other institutions. In addition, the growth from the freshmen to the seniors is relatively small

## Part I: Diversity

The issue of **diversity** both in and out of the classroom was assessed by the NSSE and FSSE instruments. The following summarizes key findings and implications from this data comparing UWW with master's public and national institutions, perceptions of freshmen vs. seniors, and perceptions of faculty vs. students.

The first table in this section includes data from UWW vs. master's public and freshmen vs. seniors. The second table in this section compares faculty vs. student perceptions of diversity issues.

**Table 1: NSSE – Comparing UWW with Master's Public and National**

(NF=Freshmen; SR=Seniors)

UWW Freshmen/Seniors Compared with Master's Public only and NSSE Nationwide Freshmen/Seniors.

(Master's Public only 2003 data is not here yet.)

<b>1: Academic, Intellectual, and Social Experiences:</b> In your experience at your institution during the current school year, about how often have you done each of the following? 1=Never 2=Sometimes 3=Often 4=Very often										
		Means								
		UWW			Master's			Nation		
		2003	2002	2001	2003	2002	2001	2003	2002	2001
e. Included diverse perspectives (different races, religions, genders, political beliefs, etc.) In class discussions or writing assignments	NF	2.68	2.6	New		<b>2.65</b>	<b>New</b>	2.73	2.65	New
	SR	2.74	2.6	2002		<b>2.68</b>	<b>2002</b>	2.75	2.65	2002
u. Had serious conversations with students of a different race or ethnicity than your own	NF	2.35	2.25	2.29		<b>2.49</b>	<b>2.5</b>	2.61	2.53	2.6
	SR	2.45	2.29	2.41		<b>2.53</b>	<b>2.54</b>	2.6	2.55	2.61
v. Had serious conversations with students who differ from you in terms of their religious beliefs, political opinions, or personal values	NF	2.61	2.47	2.56		<b>2.57</b>	<b>2.75</b>	2.77	2.64	2.85
	SR	2.66	2.54	2.82		<b>2.56</b>	<b>2.72</b>	2.69	2.6	2.79
<b>6: Enriching Educational Experiences :</b> Which of the following have you done or do you plan to do before you graduate from your institution? The percentage responding "yes" among all valid respondents.										
f. Study abroad	NF	26	32	16		<b>41</b>	<b>25</b>	38	46	28
	SR	9	11	9		<b>10</b>	<b>10</b>	18	13	12
<b>8: Educational and Personal Growth:</b> To what extent has your experience at this institution contributed to your knowledge, skills, and personal development in the following areas? 1=Very little 2=Some 3=Quite a bit 4=Very much										
l. Understanding people of other racial and ethnic backgrounds	NF	2.41	2.49	2.44		<b>2.6</b>	<b>2.56</b>	2.55	2.6	2.58
	SR	2.46	2.65	2.63		<b>2.65</b>	<b>2.63</b>	2.55	2.64	2.63
<b>9: Institutional Environment:</b> To what extent does your institution emphasize each of the following?										
c. Encouraging contact among students from different economic, social, and racial or ethnic backgrounds	NF	2.38	2.38	2.33		<b>2.45</b>	<b>2.43</b>	2.59	2.48	2.48
	SR	2.28	2.25	2.08		<b>2.32</b>	<b>2.31</b>	2.39	2.31	2.3

## **Observations:**

- Included diverse perspectives (different races, religions, genders, political beliefs, etc) in class discussions or writing assignments -- UWW was comparable to its peers. UWW showed improvement from 2002 to 2003 for both NF & SR.
- Had serious conversation with students of a difference race – UWW NF rating was much lower than peers. SR showed similar comparisons. There was minor improvement from 2002 to 2003 for both NF & SR.
- Had serious conversation with students who differ from you in terms of religious beliefs, political opinions or personal values – UWW NF was slightly lower than peers. SR was more comparable. Showed improvement from 2002 to 2003.
- Understanding people of other racial and ethnic backgrounds – UWW NF was slightly lower than peers. SR was comparable with peers. Interestingly, 2003 NF showed a minor decrease both at UWW and national from 2002.
- Anticipated study abroad – NF % was higher than master’s public and SR % was comparable to master’s public, though lower than national.
- Encouraging contact among students from different economic, social, and racial or ethnic backgrounds – NF rating was lower than national and showed almost no increase from 2002

## **Implications:**

- It seems that UWW has been successful in incorporating diversity in courses; students’ responses on diverse perspectives being included in class discussions was comparable to peer institutions, and seniors reported having a better understanding of people of other racial and ethnic backgrounds.
- UWW seems to have made more progress than its peer institutions when one compares the seniors’ response numbers. With the new focus of infusing diversity across curriculum, we should expect UWW to rise above the peer institution mean in the upcoming years.
- Perhaps improvement can be made on promoting serious conversations among students of difference races and other issues relating to contact among students from different backgrounds.

## **UWW Seniors vs. Freshmen**

### **Observations:**

- Although there is slight improvement in the reported frequency of the above mentioned activities between academic years and between freshmen and seniors, the improvement does not appear to be significant considering the University’s commitment to diversity.

### **Implications:**

- This raises the question as to whether or not our University environment adequately challenges students to engage in dialogue with others from backgrounds different than their own.

**Table 2: Faculty vs. student perceptions of diversity**

	Freshmen				Seniors			
	Very Often or Often		Never		Very Often or Often		Never	
	FA%	ST%	FA%	ST%	FA%	ST%	FA%	ST%
a Include diverse perspectives (different races, religions, genders, political beliefs, etc.) in class discussions or writing assignments	34	55	24	7	32	58	29	6
f Had serious conversations with students of a different race or ethnicity than your own	12	39	37	21	15	41	34	16
g Had serious conversations with students who are very different from them in terms of their religious beliefs, political opinions, or personal values	18	52	13	13	16	53	23	12
k. Students experiences at this institution have contributed to their knowledge, skills, and personal development in understanding people of other racial and ethnic backgrounds	49	46	32	17	25	43	42	14
f. Have you or do you plan to study abroad	58	26	18	0	30	9	23	0
c. To what extent does your institution emphasize encouraging contact among students from different economic, social, and racial or ethnic backgrounds	34	43	7	19	36	38	13	22

**Observations:**

- Students report much more exposure to diversity than what faculty perceive students’ exposure to be. More than half of freshmen and seniors report that their courses include diverse perspectives in class discussion or writing assignments. However, only one third of faculty stated that students in their selected course section engaged in such activities.
- Much higher percentages of students report having serious conversations with students who are different from them . While only a small percentage of faculty assert that in their selected courses these types of interactions are taking place.
- Faculty perceive study abroad as more important than students by a margin of two to one.
- Approximately one-third of faculty and students perceive that the UWW institutional environment encourages contact among students from different economic, social, racial and ethnic backgrounds.

**Implications:**

- When looking at these differences it is important to note that the student responses are meant to assess exposure to diversity “at your institution during the current school year,” while the faculty responses assess “How often do students in your selected course section engage in” these activities. This suggests that students may be gaining this exposure but not in the courses that faculty selected to comment on or during other campus activities.
- The recent effort to enhance exposure to diversity by infusing it into the whole curriculum rather than in isolated courses may result in more faculty responding in a positive way to item a above in future years.

- A majority of students agree that they are having serious conversations but only a small number of faculty state that such conversations are taking place in their selected classes. This may mean that these conversations are taking place outside the classroom.
- Only 25 percent of faculty who selected an advanced course to consider believe that students' experiences at UW-W have contributed to students knowledge, skills, and personal development in understanding people of other racial and ethnic backgrounds. This is not an assessment of an individual course, but an assessment by certain faculty that the university is not addressing this issue. On the other hand, faculty that selected an introductory-level course to comment on believe much more strongly that students' experiences at UW-W contribute to such knowledge. One possible explanation for this is that faculty who teach more freshman-level courses are made more aware of the events and activities around campus that provide such exposure to students.

## Part II: Expectations

The following section compiled by the NSSE Task Force addresses the theme of **expectations**. The tables and data reported here have been drawn from a larger set of reports to specifically to address items under the broader theme of expectations. The three primary sources for the tables are:

- NSSE Survey – Comparing UWW student responses to other universities with master’s programs and the overall nation
- NSSE Survey – Comparing Freshmen versus Seniors at UWW over a time period of 3 years (2001 to 2003)
- NSSE Survey versus the FSSE (faculty) survey with responses to similar items

**Table 3(a): Expectations of UWW Freshmen and Seniors compared to Universities with Master’s Programs and the Nation**

<b>1: Academic, Intellectual, and Social Experiences:</b> In your experience at your institution during the current school year, about how often have you done each of the following?										
1=Never 2= Sometimes 3=Often 4=Very often										
		Means								
		UWW			Master's			Nation		
		2003	2002	2001	2003	2002	2001	2003	2002	2001
a. Asked questions in class or contributed to class discussions	NF	2.61	2.69	2.56		2.68	2.69	2.84	2.66	2.67
	SR	3.01	2.97	3.00		3.02	3.07	3.12	2.98	2.99
b. Made a class presentation	NF	1.94	2.03	1.82		2.20	2.14	2.24	2.12	2.1
	SR	2.94	2.93	2.96		2.81	2.84	2.84	2.74	2.73
c. Prepared 2 or more drafts of a paper or assignment before turning it in	NF	2.44	2.49	2.65		2.78	2.82	2.7	2.72	2.75
	SR	2.49	2.41	2.49		2.60	2.64	2.51	2.53	2.55
d. Worked on a paper or project that required integrating ideas or info from various sources	NF	2.82	2.89	2.77		3.00	2.96	3.06	2.97	2.96
	SR	3.31	3.31	3.33		3.29	3.30	3.34	3.27	3.27
f. Came to class without completing readings or assignments	NF	2.06	2.18	2.04		2.04	2.09	2.01	2.10	2.13
	SR	2.14	2.33	2.24		2.08	2.10	2.07	2.14	2.17
r. Worked harder than you thought you could to meet an instructor's standards or expectations.	NF	2.44	2.55	2.46		2.57	2.56	2.61	2.54	2.54
	SR	2.71	2.54	2.57		2.68	2.69	2.71	2.64	2.65

**Table 3(b): Freshmen and Seniors vs Faculty Perceptions of Expectations**

<b>Student versus Faculty Expectations on Class Interaction – Class contribution and Instructor Feedback</b>	Freshmen				Seniors			
	FA: 50% or more		Never		FA: 50% or more		Never	
	ST: Very often or often				ST: Very often or often			
	FA%	ST%	FA%	ST%	FA%	ST%	FA%	ST%
a. Frequently asked questions in class or contributed to class discussions	10	49	5	2	34	70	2	2
e. Receive prompt feedback (written or oral) from instructor on students' academic performance	90	49	2	13	90	65	2	2

**Observations:**

- They were less often preparing two or more drafts of a paper or assignment before turning it in.
- NF worked less on a paper or project that required integrating ideas or information from various sources. However, SR numbers were comparable to peers, and slightly higher than Master’s public.
- More coming to class without completing readings or assignments.
- They reported working less hard than the peers to meet instructor’s expectations.
- NF reported less class participation than master’s & national
- From table 1(b) it can be interpreted that students and faculty seem to have different perceptions of each other’s expectations. For example, both freshmen and seniors were approximately 35% more likely to report that they frequently asked questions or participated in class discussion than were faculty who reported that such activities were much less frequent in their selected classes (see item a above). Further, there seems to be a disconnect between what “prompt feedback” means to students and to faculty (see item e above).

**Implications:**

- In both instances, it is clear that faculty expectations need to be spelled out more clearly. Faculty expectations for classroom discussion need to be made clear, especially if they are used as a criterion for grading. Further, faculty may want to operationalize "prompt" in their syllabi so students know when they can reasonably expect to receive feedback.
- The academic experiences measured by Question 1 (a-c, f) asks freshmen in their experience at their institution during the current school year, about how often have they asked questions or contributed to class discussions, made a class presentation, prepared two or more drafts of a paper or assignment, or came to class unprepared? The response range on a four- point scale from 1=Never to 4=very often. The mean response from UW-Whitewater freshmen on how often have you asked questions or contributed to class discussions range from 2.56 to 2.69 in the three years reported (2001-2003). The mean response on how often you have made a class presentation ranged from 1.82 to 2.03. The mean response on how often you prepared two or more drafts of a paper or assignment was 2.44 to 2.65. The mean response on how often you came to class unprepared was 2.04 to 2.18 for the three years. Mean responses from UWW freshmen to all these questions went down from 2002 to 2003.

**Table 4: Expectations of UWW Freshmen and Seniors compared to Universities with Master’s Programs and the Nation**

<b>3: Reading and Writing:</b> During the current school year, about how much reading and writing have you done? 1=None 2=Between 1-4 3=Between 5-10 3=between 11-20 5=More than 20										
		Means								
		UWW			Master’s			Nation		
		2003	2002	2001	2003	2002	2001	2003	2002	2001
b. Number of books read on your own (not assigned) for personal enjoyment or academic enrichment	NF	1.75	1.82	1.77		2.00	1.95	2.01	2.00	1.96
	SR	2.14	2.09	2.03		2.19	2.19	2.21	2.20	2.20
c. Number of written papers or	NF	1.10	1.21	1.12		1.24	1.23	1.24	1.22	1.21

reports of 20 pages or more	SR	1.58	1.61	1.58		1.61	1.61	1.66	1.61	160
d. Number of written papers or reports between 5 and 19 pages	NF	2.16	2.27	2.14		2.30	2.22	2.44	2.33	2.30
	SR	2.64	2.68	2.66		2.56	2.52	2.66	2.56	2.54
e. Number of written papers or reports of fewer than 5 pages	NF	3.64	3.34	3.4		3.16	3.12	3.30	3.16	3.13
	SR	3.27	3.22	3.4		3.01	3.03	3.11	3.02	3.03

**Observations and Implications:**

- In terms of expectations for writing, they wrote more short papers than the peers. While NF reported writing fewer long papers than its peers, SR reported comparable amount of long papers (20+ pages) and more medium length papers (5-20 pages) than Master’s public.
- Freshmen reported writing very few long papers (exceeding 20 pages) while seniors reported a slightly higher number. Both freshmen and seniors reported writing between five to ten short papers (less than 5 pages), and writing between one to four medium papers (between 5 and 19 pages). This amounts to approximately six to fourteen papers in total during the academic year. Is this enough? Papers are one method for learners to analyze, synthesize, make judgments, and apply theories or concepts.
- They read fewer books on their own for personal enjoyment or academic enrichment than the peers. Same for SR.

**Implications:**

- Perhaps student expectations can be raised by faculty communicating to new students through the New Student Seminars, as well as in all classes, on amount of study time expected of students per credit hour and the importance of research as they work on paper or project. They can be taught basic research techniques that involve selecting, evaluating and analyzing resources. The papers should synthesize and integrate ideas they learn from the resources in addition to their ideas. Across the curriculum, faculty can communicate clearer expectations to the students to challenge them to do better than they think they can. We advocate writing across curriculum, the writing should demand similar research requirements and high quality writing that comes from preparing several drafts. In addition, we should look into improving on capstone course or other culminating experience.

**Table 5: Expectations of UWW Freshmen and Seniors compared to Universities with Master’s Programs and the Nation**

<b>4: Challenge of Examinations:</b> To what extent did your exams during the current school year challenge you to do your best work?										
1=Very Little to 7=Very much										
		UWW				Master’s			Nation	
		2003	2002	2001	2003	2002	2001	2003	2002	2001
	NF	5.22	5.30	5.48		5.50	5.52	5.54	5.53	5.56
	SR	5.19	5.13	5.36		5.53	5.57	5.45	5.48	5.53

**Observations and Implications**

- There is a decrease in the reported rate for freshmen regarding the extent they found examinations challenging. The decrease has occurred from 2001(5.48) to 2002 (5.30) to 2003 (5.22). While the overall score still is in a positive range, this is a trend to watch in the future.
- They rated the exams challenge level lower than the peers. Even more significantly so by SR.

**Table 6: Expectations of UWW Freshmen and Seniors compared to Universities with Master's Programs and the Nation**

<b>6: Enriching Educational Experiences</b> :Which of the following have you done or do you plan to do before you graduate from your institution?										
The percentage responding "yes" among all valid respondents.										
		UWW			Master's			Nation		
		2003	2002	2001	2003	2002	2001	2003	2002	2001
h. Culminating senior experience (comprehensive exam, capstone course, thesis, project, etc.)	NF	18	48	24		67	36	44	69	36
	SR	34	38	34		54	49	59	55	49

**Table 7: Enriching Educational Experiences for Freshmen vs Seniors (2001 to 2003)**

<b>Which of the following have you done or do you plan to do before you graduate...?</b>	<b>2003</b>		<b>2002</b>		<b>2001</b>	
	<b>NF</b>	<b>SR</b>	<b>NF</b>	<b>SR</b>	<b>NF</b>	<b>SR</b>
The percentage responding "yes"						
c. Participate in a learning community or some other formal program where groups of students take two or more classes together	<b>29</b>	24	<b>50</b>	25	<b>na</b>	na
d. Work on a research project with a faculty member outside of course or program requirements	<b>15</b>	18	<b>37</b>	21	<b>19</b>	15
h. Culminating senior experience (comprehensive exam, capstone course, thesis, project, etc.)	<b>18</b>	34	<b>48</b>	38	<b>24</b>	34

**Observations and Implications:**

- Very low on the culminating senior experience covering comprehensive exam, capstone course, etc. Even though the % went up for SR, but in comparison with the peers, the difference was significant for both NF and SR. Also the % dropped significantly from 2002 to 2003 for NF signally either a different sampling group taking the survey or major change in curriculum.

**Note: Regarding Tables 3-7**

**Related indicators to lower academic expectations include:**

Freshmen at UW-Whitewater participate in classroom discussions at rates lower than freshmen in the 2003 national sample and also report making class presentations less often than their colleagues at peer institutions. Regarding out of class activities, significantly less freshmen at UW-Whitewater prepare multiple drafts of papers before submitting a finished product. Additionally Whitewater freshmen reported coming to class unprepared significantly more often than their colleagues at other institutions

**Table 8: Expectations of Educational and Personal Growth for Freshmen vs Seniors  
(2001 to 2003)**

To what extent has your experience at this institution contributed to your knowledge, skills, and personal development in the following areas?	2003		2002		2001	
	NF	SR	NF	SR	NF	SR
1=Very little; 2=Some; 3=Quite a bit 4=Very Much						
j. Learning effectively on your own.	<b>2.82</b>	2.87	<b>2.86</b>	2.99	<b>2.86</b>	3.06
k. Understanding yourself.	<b>2.63</b>	2.73	<b>2.82</b>	2.91	<b>2.74</b>	3.09
l. Understanding people of other racial and ethnic backgrounds.	<b>2.41</b>	2.46	<b>2.49</b>	2.65	<b>2.44</b>	2.63
n. Developing a personal code of values and ethics	<b>2.39</b>	2.52	<b>2.45</b>	2.58	<b>2.51</b>	2.80
o. Contributing to the welfare of your community	<b>2.10</b>	2.15	<b>1.99</b>	2.30	<b>1.98</b>	2.42

**Observations and Implications:**

In response to how students believe UW-Whitewater has contributed to their personal development there is not a significant difference between the freshmen and senior scores, all reporting in the middle of the range. During the last three years seniors have reported a decrease in “understanding yourself” for 3.09 (2001) to 2.91 (2002) to 2.73 (2003). There is a similar, although slight, downward trend to “understanding people of other racial and ethnic backgrounds”, “developing a personal code of values and ethics”, and “contributing to the welfare of your community”. Responses to these questions in the last three years all fall into the “some” range.

**Table 9: Expectations of UWW Freshmen and Seniors compared to Universities with Master’s Programs and the Nation**

<b>7: Time Usage:</b> About how many hours do you spend in a typical 7-day week doing each of the following?										
1=0 hrs/wk; 2=1-5 hrs/wk; 3=6-10 hrs/wk; 4=11-15 hrs/wk; 5=16-20 hrs/wk										
6=21-25 hrs/wk; 7=26-30 hrs/wk; 8=more than 30 hrs/wk										
		UWW			Master’s			Nation		
		2003	2002	2001	2003	2002	2001	2003	2002	2001
a. Preparing for class (studying, reading, writing, rehearsing, and other activities related to your academic program)	NF	3.75	3.7	3.77		3.70	3.61	4.11	3.89	3.86
	SR	3.83	3.75	3.76		3.93	3.88	4.13	4.02	3.99

**Observations:**

- Time used by NF preparing for class averaged less than 11 hours or less than one hour per credit hour, lower than that of peer institutions. SR showed slight increase of time spent, but the gap between UWW SR and peers was greater.

**Table 10: Expectations of UWW Freshmen and Seniors compared to Universities with Master's Programs and the Nation**

<b>9: Institutional Environment:</b> To what extent does your institution emphasize each of the following? 1=Very little 2=Some 3=Quite a bit 4=Very much										
	UWW				Master's			Nation		
		2003	2002	2001	2003	2002	2001	2003	2002	2001
a. Spending significant amounts of time studying and on academic work	NF	3.05	2.95	3.01		3.04	3.05	3.18	3.05	3.08
	SR	2.86	2.91	2.87		3.04	3.05	3.15	3.03	3.05

**I. Table 11: Freshmen and Seniors vs Faculty Perceptions**

<b>Student Institution Experience, Including feedback from Faculty</b>	<b>Freshmen</b>				<b>Seniors</b>			
	FA: 50% or more		Never		FA: 50% or more		Never	
	ST: Very often or often				ST: Very often or often			
	FA%	ST%	FA%	ST%	FA%	ST%	FA%	ST%
d. To what extent has the students' experience at this institution contributed to their knowledge, skills, and personal development in speaking clearly and effectively	41	53	32	13	44	66	28	5
e. Receive prompt feedback (written or oral) from instructor on students' academic performance	90	49	2	13	90	65	2	2
f. To what extent has the students' experience at this institution contributed to their knowledge, skills, and personal development in analyzing quantitative problems	27	52	49	9	35	65	37	3
g. To what extent has the students' experience at this institution contributed to their knowledge, skills, and personal development in using computing and information technology	29	66	44	8	33	83	30	2

**Observations:**

- Both NF & SR perception of the institutional environment emphasis of spending significant amount of time studying and on academic work were lower than that of peer institutions.
- Student perceptions of UWW providing the support needed to succeed academically was also lower than that of other institutions.
- Students and faculty seem to come to different conclusions regarding the skills that they have developed while students at UW-Whitewater. In regard to writing clearly and effectively, speaking clearly and effectively, analyzing quantitative problems and using computing and information technology (see items c, d, f and g above) students were more likely to see positive development, while faculty were more limited in their assessment of development in these areas.

**Implications:**

- Faculty expect higher levels of performance in writing and speaking skills, quantitative reasoning and use of computing and information technology; yet students believe that they are performing at these levels, so again, it is necessary for faculty to make their expectations clearer.

### Part III: Mental Activities

The third area of significance in the NSSE report centers on **mental activities**. The questions related to mental activities ask students estimate how much the coursework they've been involved with emphasized different levels of cognition, ranging from basic memorization to the highest levels of analysis, synthesis and evaluation. The responses to these questions, in section 2 of the survey (Mental Activities), relate directly to the responses in section 8 (Educational and Personal Growth), which ask students to estimate how much their university experiences have contributed to their knowledge, skills and personal growth in writing, speaking, critical and analytic thinking and quantitative problem analysis. Table One represents the response means for freshmen and seniors on these questions. Table Two represents the responses of faculty to parallel questions.

**Table 11: Freshmen and Senior Responses**

During the current school year, how much has your coursework emphasized the following mental activities?										
1=Very Little 2=Some 3=Quite a bit 4=Very much										
		Means								
		UWW			Master's			Nation		
		2003	2002	2001	2003	2002	2001	2003	2002	2001
a. Memorizing facts, ideas, or methods from your courses and readings so you can repeat them in pretty much the same form	NF	2.98	2.97	2.95		<b>3.01</b>	<b>3.02</b>	2.93	3	3
	SR	2.84	2.83	2.8		<b>2.83</b>	<b>2.86</b>	2.72	2.8	2.84
b. Analyzing the basic elements of an idea, experience, or theory such as examining a particular case or situation in depth and considering its components	NF	2.93	2.95	2.9		<b>3.04</b>	<b>2.99</b>	3.15	3.06	3.05
	SR	3.19	3.19	3.18		<b>3.22</b>	<b>3.22</b>	3.28	3.23	3.23
c. Synthesizing and organizing ideas, information, or experiences into new, more complex interpretations and relationships	NF	2.67	2.63	2.55		<b>2.75</b>	<b>2.7</b>	2.88	2.76	2.76
	SR	2.93	2.89	2.91		<b>2.99</b>	<b>2.96</b>	3.07	2.98	2.97
d. Making judgments about the value of information, arguments, or methods such as examining how others gathered and interpreted data and assessing the soundness of their conclusions	NF	2.69	2.65	2.59		<b>2.75</b>	<b>2.73</b>	2.83	2.73	2.73
	SR	2.8	2.75	2.85		<b>2.9</b>	<b>2.87</b>	2.96	2.88	2.86
e. Applying theories or concepts to practical problems or in new situations	NF	2.91	2.82	2.64		<b>2.88</b>	<b>2.85</b>	3.01	2.93	2.91
	SR	3.14	3.09	3.08		<b>3.13</b>	<b>3.13</b>	3.2	3.13	3.13
<b>8: Educational and Personal Growth:</b> To what extent has your experience at this institution contributed to your knowledge, skills, and personal development in the following areas?										
1=Very Little 2=Some 3=Quite a bit 4=Very much										
c. Writing clearly and effectively	NF	2.77	2.76	2.73		<b>2.85</b>	<b>2.85</b>	2.98	2.79	2.79
	SR	3	2.91	2.95		<b>2.99</b>	<b>2.98</b>	3.09	2.96	2.87
d. Speaking clearly and effectively	NF	2.55	2.52	2.43		<b>2.65</b>	<b>2.62</b>	2.72	2.55	2.54
	SR	2.86	2.9	2.96		<b>2.9</b>	<b>2.92</b>	2.99	2.86	2.87
e. Thinking critically and analytically	NF	2.98	2.94	2.89		<b>3</b>	<b>2.96</b>	3.2	3.03	3.01
	SR	3.19	3.15	3.2		<b>3.21</b>	<b>3.22</b>	3.35	3.24	3.23
f. Analyzing quantitative problems	NF	2.49	2.51	2.52		<b>2.57</b>	<b>2.54</b>	2.68	2.61	2.59
	SR	2.8	2.86	2.84		<b>2.86</b>	<b>2.86</b>	2.89	2.88	2.87

**Table 12: Faculty Responses to Parallel Questions**

Mental Activities: During the current school year, how much has the coursework emphasized the following mental activities?								
	Freshmen				Seniors			
	Very much or Quite a bit		Very little		Very much or Quite a bit		Very little	
	FA%	ST%	FA%	ST%	FA%	ST%	FA%	ST%
a. Coursework emphasizes: Memorizing facts, ideas, or methods from your course and readings	46	72	20	4	25	68	30	8
b. Coursework emphasizes: Analyzing the basic elements of an idea, experience, or theory	83	73	0	2	84	85	4	0
c. Coursework emphasizes: Synthesizing and organizing ideas, information, or experiences	66	56	2	6	75	68	7	3
d. Coursework emphasizes: Making judgments about the value of information, arguments, or methods	37	57	17	6	72	62	9	5
e. Coursework emphasizes: Applying theories or concepts to practical problems or in new situations	63	68	12	6	79	79	2	2
Educational and personal growth: To what extent has the students' experience at this institution contributed to their knowledge, skills, and personal development in the following areas?								
	Freshmen				Seniors			
	Very much or Quite a bit		Very little		Very much or Quite a bit		Very little	
	FA%	ST%	FA%	ST%	FA%	ST%	FA%	ST%
c. Writing clearly and effectively	56	67	17	7	49	74	12	5
d. Speaking clearly and effectively	41	53	32	13	44	66	28	5
e. Thinking critically and analytically	80	76	0	4	88	83	2	4
f. Analyzing quantitative problems	27	52	49	9	35	65	37	3

**Observations:**

- Cognitive activities emphasized in their coursework are measured by 2 (a-e), which asks the freshmen during the school year, how much their coursework emphasized memorizing, analyzing, synthesizing, making judgments, and applying theory.
- Mean response from UW-Whitewater freshmen on memorizing range from 2.95 to 2.98 for the three years reported (2001-2003). Mean response on analyzing ranges from 2.90 to 2.95. Mean responses on synthesizing range from 2.55 to 2.67. Mean response on making judgments ranges from 2.59 to 2.69, and mean response on applying theory ranges from 2.64 to 2.91, again for the three years.
- Freshmen at UW-Whitewater report in the 2003 data that their coursework emphasizes memorization at about the same rate as their counterparts at other institutions, as do seniors.
- Whitewater freshmen and seniors both report less emphasis in their courses on those higher order cognitive activities including analyzing, synthesizing, making judgments, and application of concepts than do their counterparts at peer

- institutions. These skills are components of Bloom's Taxonomy, Cognitive Domain and represent higher cognition and abilities to use skills and knowledge.
- The responses of freshmen and seniors to several questions under "Educational and Personal Growth" namely: writing and speaking clearly and effectively, thinking critically and analytically, and analyzing quantitative problems may also be linked to mental activities.
  - The weakness in the latter skills may also be linked to the results of other questions which are related to expectations discussed previously. Students reported less work on papers or project that required integrating ideas or information from various sources; less written papers/reports of greater length and more work on papers of fewer than 5 pages than their peers; preparing two or more drafts of a paper or assignment before turning it in less often; significantly less exposure to comprehensive exams, and less involvement with capstone course type of experiences.
  - Over two-thirds of freshmen and seniors report that their coursework emphasizes memorization (see item a below), while less than half of faculty reporting on a freshman-level course and one quarter of faculty reporting on an advanced course agreed that their coursework emphasizes memorization.
  - Although faculty and student perceptions of other mental activities required by coursework are similar, with faculty generally believing that their courses require more analysis and synthesis than students report.

### **Implications:**

Since seniors report less memorization of facts, ideas or methods than freshmen, which is to be expected, it must be noted that the decrease is statistically small and the overall number reflects that both groups report memorization emphasized "quite a bit" in their coursework. Conversely, the increase reported by seniors in analyzing, synthesizing, making judgments, and applying theories, while also expected, is also slight. The question that looms is: is this change between freshmen and seniors enough? Do we desire a progressively higher degree of analyzing, synthesizing, making judgments, and applying theories by our students throughout their undergraduate experience? An interesting comparison will be to look at the reported frequency of these mental activities by the seniors in 2005, the same cohort that comprised the freshmen 2001 sample (not shown in the above table). This will be a good indicator of change over time.

It seems we need to strengthen the analyzing, synthesizing, judgments and theorizing skills of the students by increasing instruction, opportunity and expectations in all classes. Perhaps faculty need to re-visit the kinds of evaluation tools they're using and look for a balance between memorization and other assessments of mental activity. Also, faculty may want to clarify the mental tasks (e.g., memorization, analysis, synthesis, judgment) required by various assignments. In addition, those working with program goals and indicators should examine the expectations of growth and development defined throughout every program, including what the university requirements contribute to student skills and knowledge and how those are assessed and built upon between initial freshman and final senior semesters.