



# NSSE 2003 REPORT

## Western Michigan University

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Presented and Compiled by:

Linda Delene, Professor and Vice Provost,  
Academic Planning and Assessment

Georgios Loizides, Doctoral Associate, Sociology

Andrew Henry, Technical Assistant, EEG

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# From National “Ratings” to Campus “Engagement”<sup>1</sup>

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- National ratings focus on school “inputs”
- NSSE has a focus on engagement, i.e., how effectively students use the resources at their disposal
- NSSE is a tool of “soft accountability” ... helps schools cultivate practices known to improve undergraduate education

[1. *What Makes A College Good?* The Atlantic Monthly, Sept. 2003, pp. 118-126.]



# NSSE-National Survey of Student Engagement

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- What *is* “Student Engagement?”
- Behaviors contributing to learning and development, for example, how often students contribute to class discussions, when students work harder than they thought they could to meet instructor expectations, when students have serious conversations with students of a different race or ethnicity, or when students work on research or creative activities with faculty members

# Student Engagement - Embedded in WMU Mission<sup>2</sup>



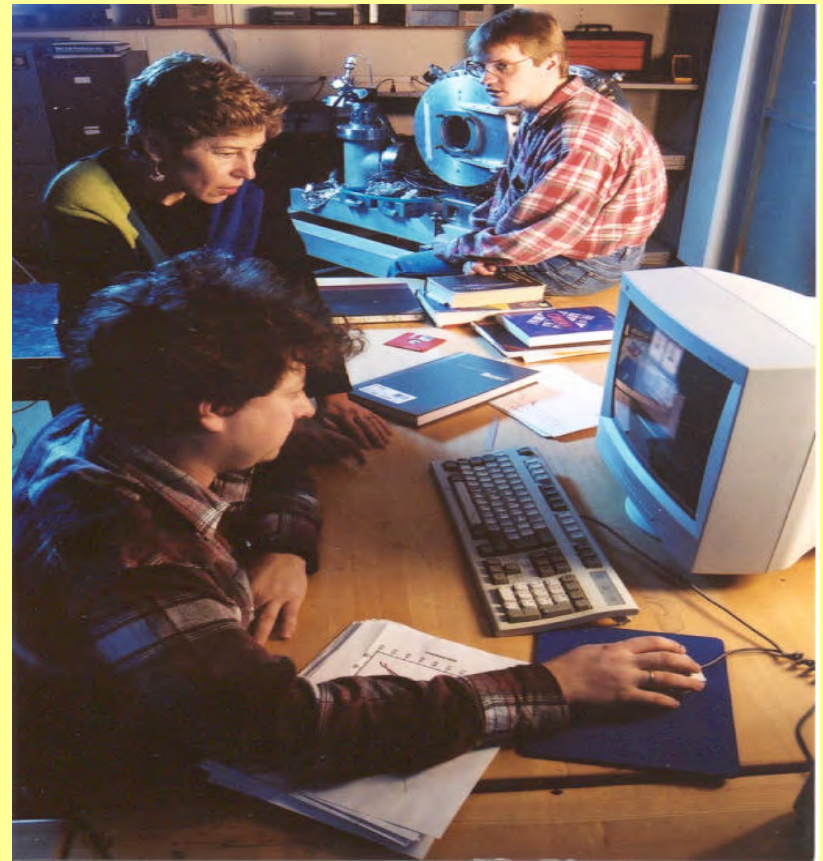
- *“WMU is a student-centered research university, building intellectual inquiry, investigation, and discovery into all undergraduate, graduate, and professional programs”*

[2. WMU Board of Trustees,  
12/07/01]

# WMU'S Mission "Thesis" Statement as Engagement<sup>3</sup>

- In a "student centered research university", all students have the opportunity to be *engaged* in research and or creative activities with faculty members...

[3. Mission Implementation Report,  
7/6/03, slide # 10]



# NSSE Based on “Best” Educational Practices <sup>4</sup>

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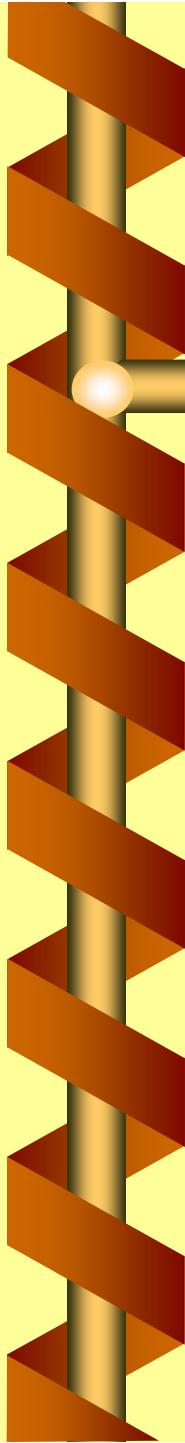
- Student-faculty contact
- Active learning
- Prompt feedback
- Time on task
- High expectations
- Cooperation among students
- Respect for diverse talents and ways of learning

[4. Seven principles of good practice in undergraduate education] (Chickering and Gamson, 1987)

# Student Engagement is Two-Dimensional

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- *Student dependent behaviors*, for example, ideas from class that are discussed with others outside of class...
- *Institution dependent behaviors*, for example, work on a class project or a presentation with other students...



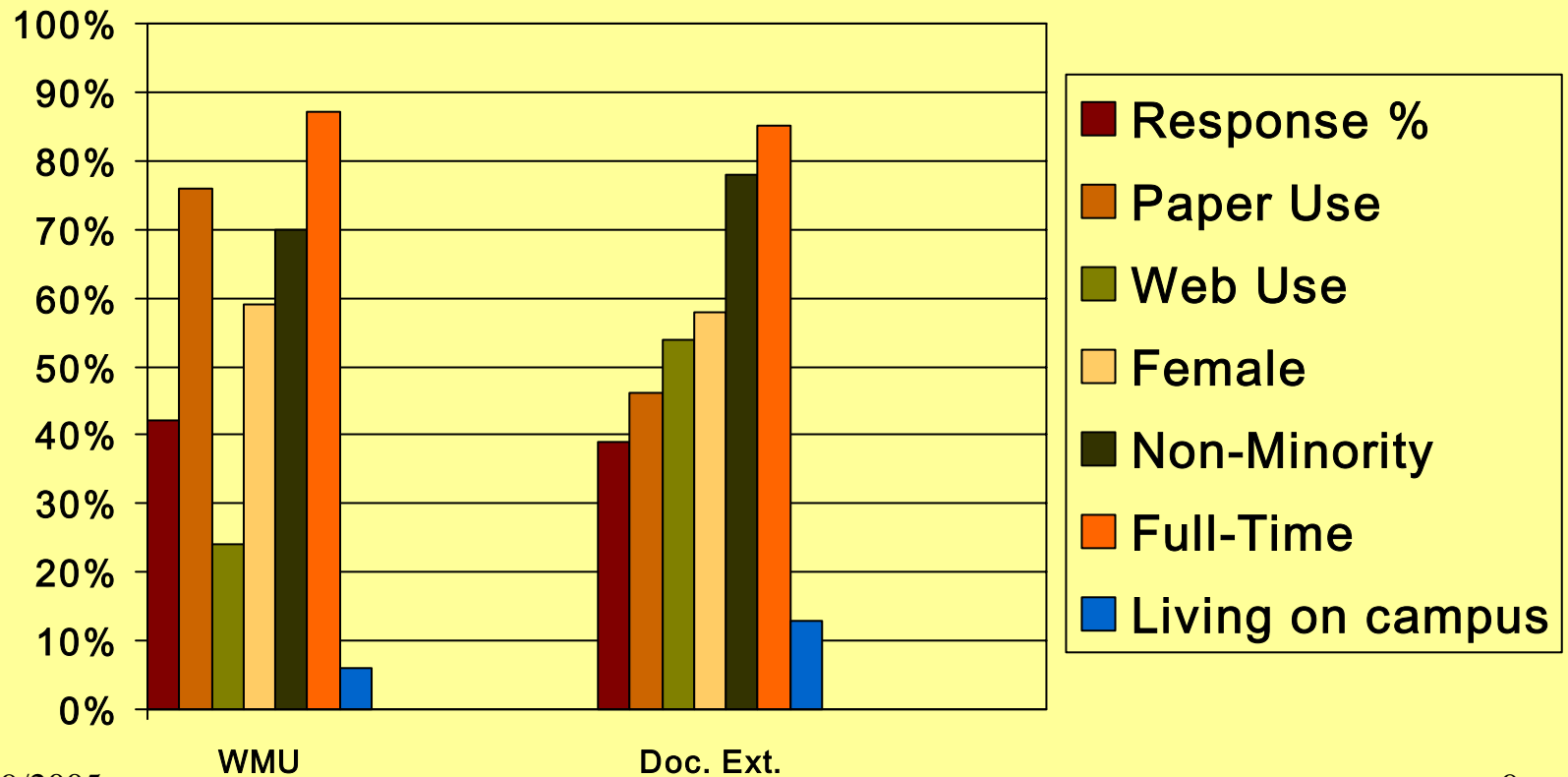
# Examples of Student Engagement

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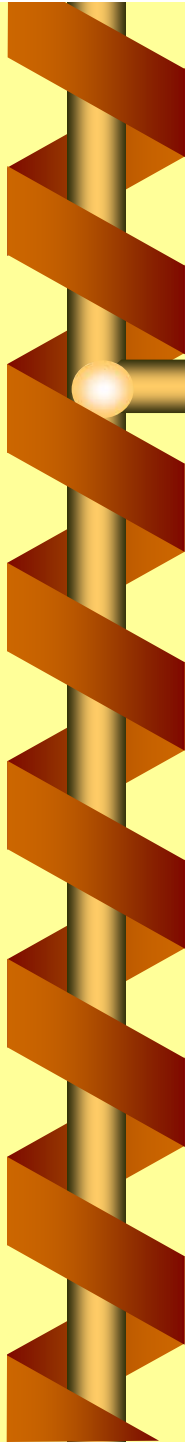
- (a) Students involved with community-based research or field projects
- (b) Students producing a senior or graduate thesis
- (c) Students assisting faculty with research in clinics, labs, offices, or studios
- (d) Students presenting posters and papers at conferences and professional meetings
- (e) Students conducting creative activities with faculty, for example, in clinics, labs, or various performance settings
- (f) Students studying abroad, involved in field/clinical internships
- (g) Students actively participating in class

# Respondent Characteristics

- Percentages for WMU Seniors vs. Doctoral Extensive Seniors



7/19/2005



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# Overview of 13 NSSE “Item Clusters”

7/19/2005



# 1. Academic and Intellectual Experiences

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[class presentations, paper drafts, tutored others, using email with instructor]

WMU data same for other doctoral-extensive schools except: (a) *substantially* higher group work *in class*, (b) *substantially* lower freshmen scores for tutoring other students, (c) *somewhat* lower freshmen scores working on community-based projects, and (d) *slightly* lower use of e-mail by seniors for instructor communication

## 2. Mental Activities

[Items about memorizing facts, analyzing, and synthesizing, making judgments, and applying theories/concepts to problems]

- WMU freshmen scores are *slightly* higher for the memorization of facts with *slightly* or *somewhat* lower scores for analyzing, synthesizing, and applying theories to problems than other students
- WMU senior scores are near the doc-extensive means except for *substantially* lower scores for analysis, and *somewhat* lower scores for synthesizing

# 3. Examinations

[Extent exams challenge students to do their best work]

- Freshman scores are *somewhat* lower than other doc-extensive schools 2002 & 2003
- Senior scores near the doc-extensive averages





## 4. Reading and Writing

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[Number of papers or reports written that are less than five, five to nineteen, or more than twenty pages]

- WMU *writing* scores for 1-5 page papers (both freshmen and seniors) *substantially or somewhat* higher than doc-extensive means. Freshmen scores were substantially higher for papers of 20 pages or more. Other WMU scores are near the doc-extensive means.
- WMU *reading* scores (both freshman and seniors) revolve around the doc-extensive mean scores

# 5. Problem Sets



- [Problem sets that take less than or more than one hour to complete]
- Both WMU freshman and seniors scores are near the doc-extensive mean for 1 hr+ problems
  - Freshman scores are *substantially* and senior scores are *somewhat* higher for *less than* one hour problem sets

## 6. Homework Problems

[Number of homework problems that take more than 15 minutes to complete in a week]

- WMU student scores comparable to means for students at other doc-intensive schools





## 7. Enriching Educational Experiences

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[Internships, study abroad, community service, foreign language study, or research and creative activity engagement with faculty members]

WMU scores are average with following exceptions

- WMU seniors score *slightly* higher for internships
- WMU freshmen score *substantially* lower on community service and *somewhat* lower on research engagement
- *Substantially* lower scores (for both seniors and freshman) for foreign language study and study abroad experiences than other doc-extensive schools

## 8. Quality of Relationships



[Relationships with other students, faculty, and administrative staff]

- WMU scores around the doc-extensive mean scores with one exception
- WMU freshman scores are *slightly* lower in terms of relationships with other students

## 9. Time Usage

[Time spent preparing for class, working off campus, in co-curricular activities, and relaxing and socializing]

- WMU freshmen spend *substantially* less time preparing for class, and *slightly* more time socializing and relaxing, and less time on co-curricular events
- WMU senior scores are around the doc-extensive means, except for *substantially* more time working off-campus and in commuting to class where scores are much higher than for other doc-extensive students



# 10. Institutional Environment

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[Time spent on academic work, attending campus events/activities, encouraging contact among “Others”, providing support to thrive socially, thinking critically and analytically, voting, learning on their own, solving complex real-world problems, and developing a personal code of ethics]

- Most WMU scores are *slightly* lower than other doc-extensive student scores with the following noted exceptions



# 10. Institutional Environment - Continued

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- Both WMU freshmen and seniors report *substantially* less time studying
- WMU seniors scores indicate *somewhat* less help in coping with non-academic issues, and *somewhat* less help in encouraging contact with “Others”

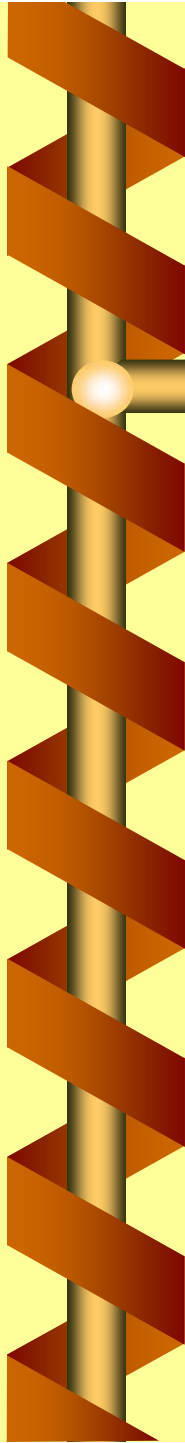


# 11. Educational and Personal Growth

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[Acquiring broad general education, work-related skills, writing and reading, thinking critically, analyzing quantitative problems, using computers, working effectively with others, voting, learning on your own, understanding oneself and others, developing values and ethics, contributing to the community]

- WMU freshman scores are *substantially* lower for developing a personal code of values and ethics, in contributing to the community, and in learning effectively on their own



# 11. Educational and Personal Growth - Continued

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- Both WMU freshmen and seniors scores are *substantially* lower for thinking critically and analytically, for analyzing quantitative problems, and for solving complex real-world problems than students at other doc-extensive schools
- Both WMU freshmen and senior scores are *slightly* lower on acquiring a broad general education

# 12. Academic Advising

[Quality of academic advising received]

- WMU freshman scores are at the doc-extensive average
- WMU senior scores slightly lower than other doc-extensive schools



# 13. Satisfaction

[Two integrative questions: (a) Evaluate your entire educational experience at WMU, and (b) If you could start over, would you go to the same institution?]

- WMU scores for freshmen and seniors on both questions are *substantially* lower than for students at other doc-extensive institutions
- Cluster has possible consequences in terms of word-of-mouth referrals, campus spirit, loyalty, and institutional pride

# Benchmark Comparisons



- In addition to overall student mean score differences noted, NSSE reports on five categories of benchmarks for further institutional comparisons



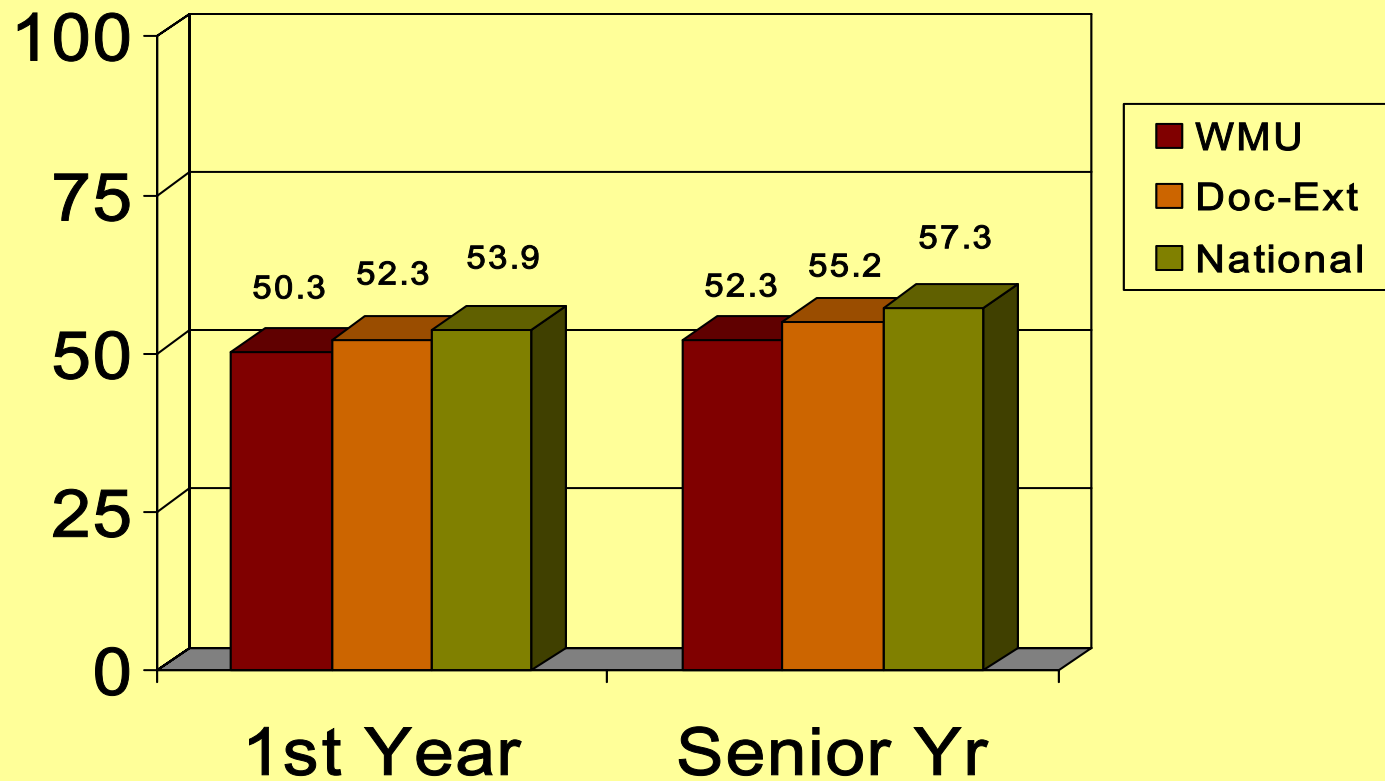
# Five Institutional Benchmarks

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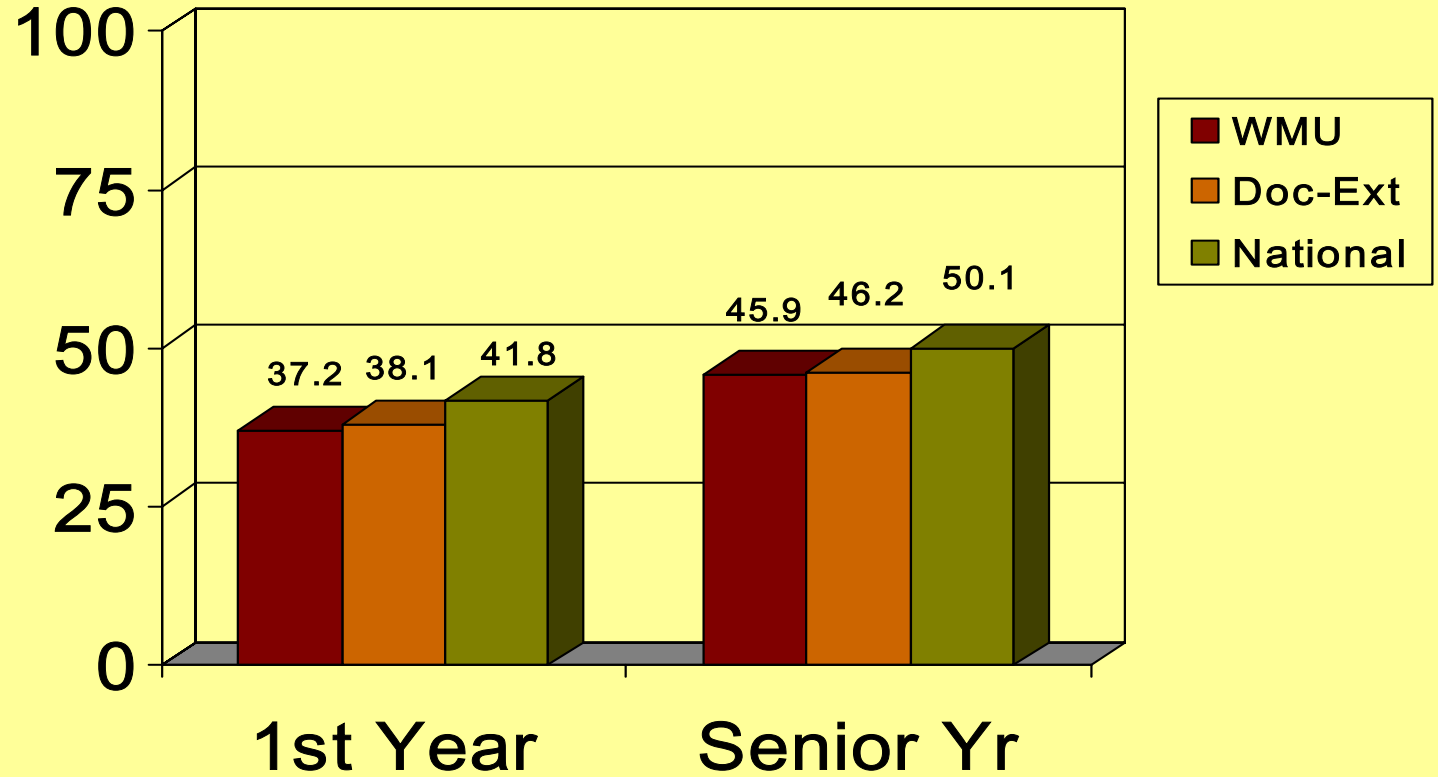
- Level of academic challenge
- Active and collaborative learning
- Student-faculty interactions
- Enriching educational experiences
- Supportive campus environment

# Level of Academic Excellence

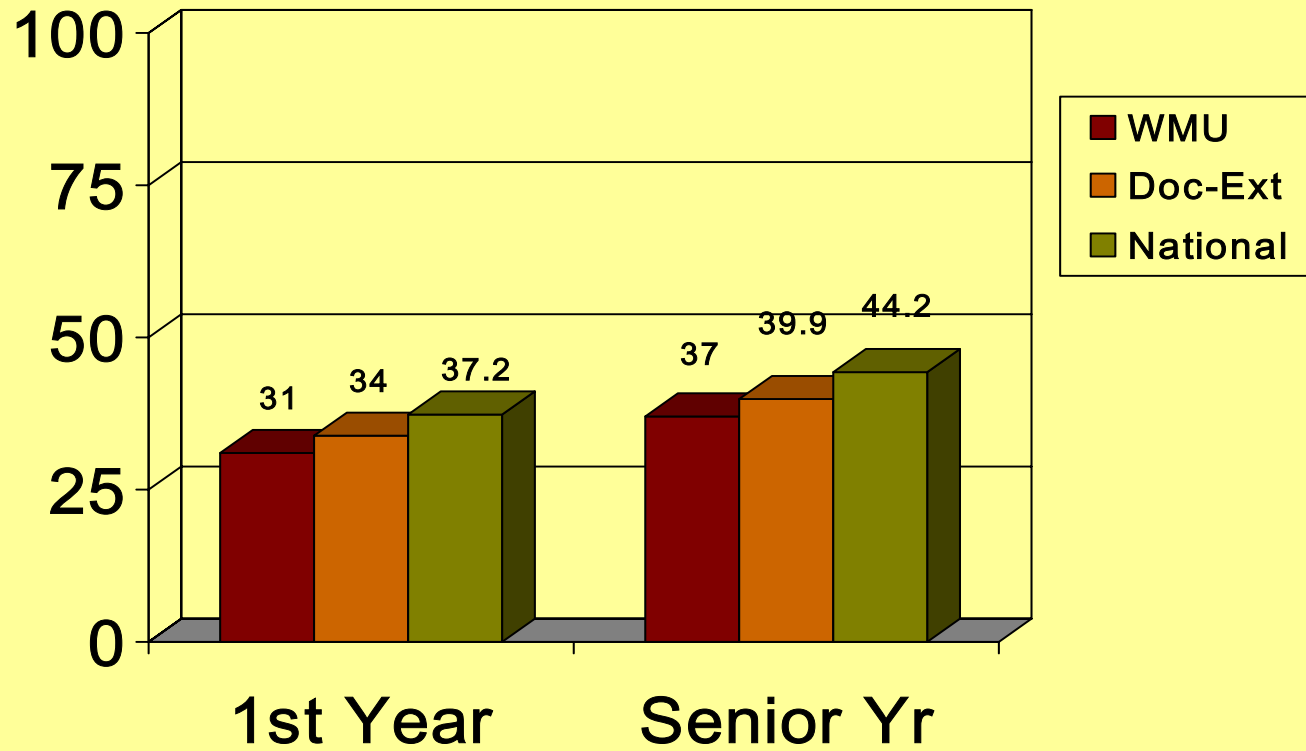
Benchmark Scores



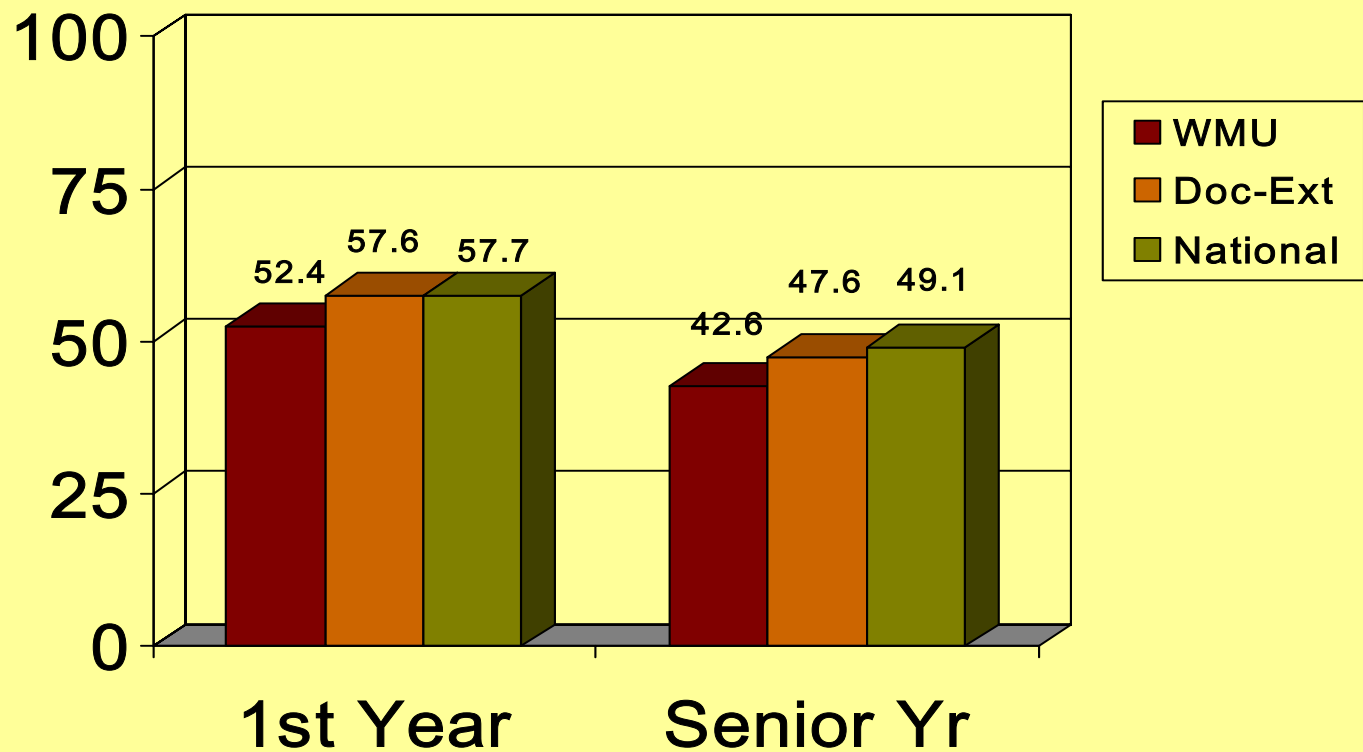
# Active, Collaborative Learning



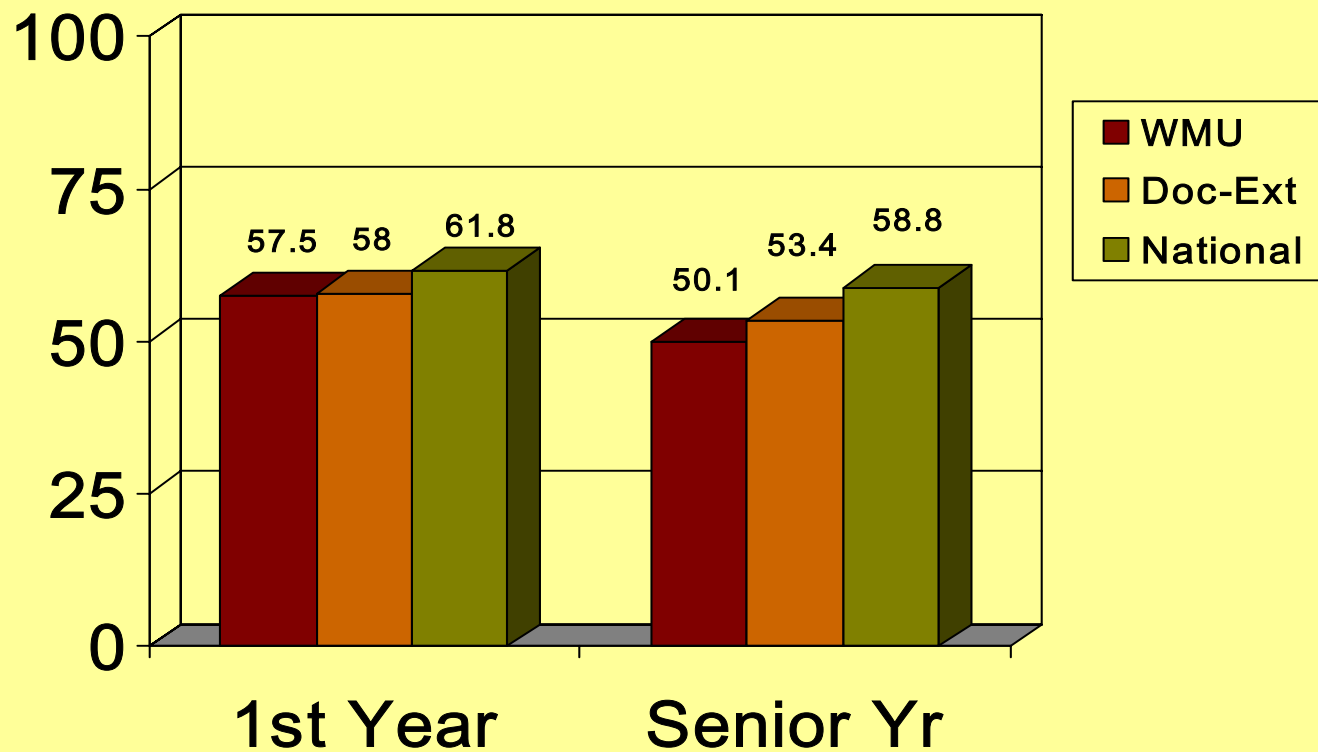
# Student-Faculty Interactions



# Enriching Educational Experiences



# Supportive Campus Environment



# Comparison of Standard Scores

Table #1

Benchmark	First-Year Students			Senior Students		
	WMU	Doc-Ext	Standard Score	WMU	Doc-Ext	Standard Score
Level of Academic Challenge	50.3	52.3	-0.6	52.3	55.2	-1.3
Active and Collaborative Learning	37.2	38.1	-0.3	45.9	46.2	-0.1
Student-Faculty Interaction	31	34	-1	37	39.9	-0.8
Enriching Educational Experiences	52.4	57.6	-1.1	42.6	47.6	-1.2
Supportive Campus Environment	57.5	58	-0.2	50.1	53.4	-0.8



# Explanation of Statistics

- **Benchmark Score:** The weighted arithmetic average (mean) of the corresponding survey items, calculated by dividing the sum of values for each item by the total number of students responding to that item. Each benchmark was put on a 100-point scale. Comparison group benchmark scores are the average of all institutional benchmark scores within the group.
- **Score Difference:** The result of subtracting the comparison group score (Carnegie Classification or national) from your institution's score on each benchmark.
- **Standard Deviation:** The average amount each institution's benchmark score deviates from the mean of all benchmark scores in the comparison group. The greater the dispersion of scores the larger the standard deviation.
- **Standard Score (SS):** In statistical terms, this is a z score, the standardized magnitude of the difference between WMUI's benchmark score and the mean of the doctoral extensive group. It is calculated by dividing the score difference by the standard deviation of the distribution of scores for the comparison group.
- Assuming the group means are normally distributed, a SS of 0.5 refers to a benchmark score that is greater than 69% of all comparison group schools, and 1.0 is greater than 84%. Likewise, a negative SS of -0.5 corresponds to a score that is better than 31% of the comparison group, and a -1.0 corresponds to an institution score better than only 16% of the comparison group. A SS of zero indicates that the institution and comparison group benchmark scores are equal, and that the institution's score is higher than roughly 50% of the other schools in the group. These values are illustrated in the table and chart at the bottom of page 8 of this report.
- Also note the sign of the SS. A positive sign means that your institution's score was greater than the comparison group average, thus showing an affirmative result for the institution. A negative sign indicates the institution lags behind, suggesting that the student behavior or institutional practice represented by the benchmark may warrant attention. [Nature of question may reverse positive and negative signs.]

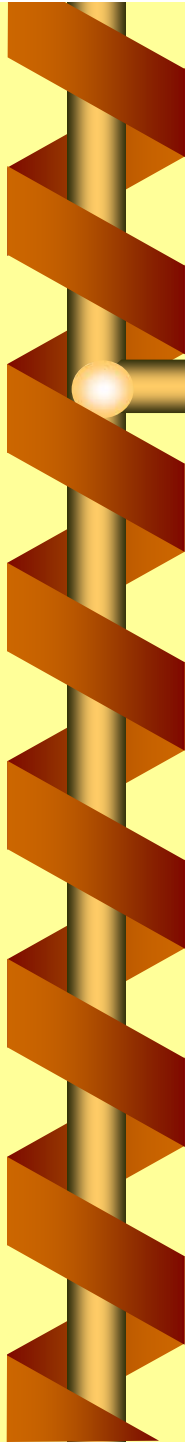
# Comparison of WMU NSSE 2002 and 2003 Benchmarks

Benchmark	First-Year Students			Senior Students		
	2003 Standard Score	2002 Standard Score	Difference	2003 Standard Score	2002 Standard Score	Difference
Level of Academic Challenge	-0.6	-0.8	+0.2	-1.3	-0.8	-0.5
Active and Collaborative Learning	-0.3	-1.0	+0.7	-0.1	0.8	-0.9
Student-Faculty Interaction	-1.0	-0.8	-0.2	-0.8	-0.3	-0.5
Enriching Educational Experiences	-1.1	-1.0	-0.1	-1.2	-1.1	-0.1
Supportive Campus Environment	-0.2	-0.7	+0.5	-0.8	0.1	-0.9

# 2002 versus 2003 Data

- Initial review of 2<sup>nd</sup> set of NSSE data suggests the need for undergraduate improvement strategy at WMU
- Detailed NSSE 2003 Report will be published Jan 2004





# Improvement Recommendations

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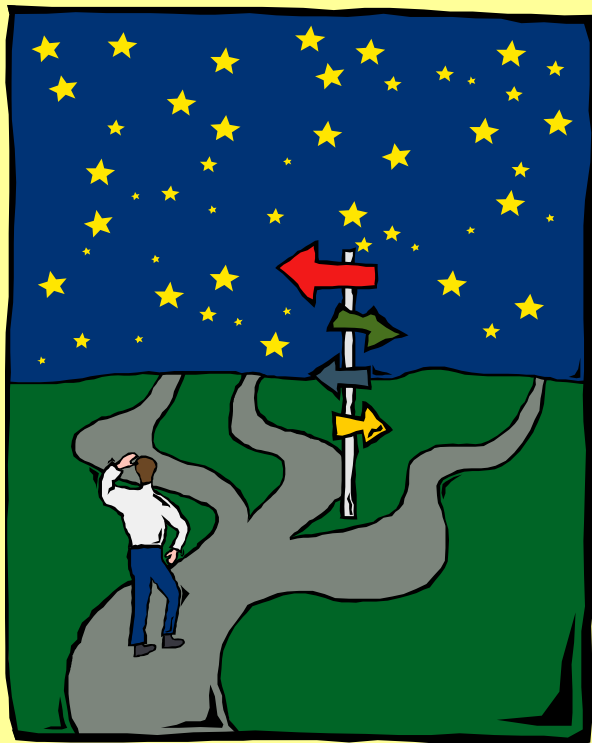
- 1) Design and structure a positive first-year experience for all undergraduate students
- 2) Add value to general education program
- 3) Design, staff, and fund faculty workshops on practices and methods of student engagement
- 4) Inventory current student engagement by type/dept/college to find “models” for WMU
- 5) Conduct mandatory exit interviews for all early-departure students
- 6) Reward faculty and students for “best” engagement practices

# Realism within Fiscal Constraints

- The improvement of undergraduate life and education is *essential* to the accomplishment of WMU's mission as well as to its continuing academic development as a research university
- Senate leadership in its councils is crucial
- Where's the money?



# KEY RECOMMENDATION



- President establishes an “expert team” to acquire external funds for the improvement of undergraduate life and education at WMU
- Comments - Questions?