

Understanding the Gender Differences: An Approach to Connecting Student Engagement and Faculty Expectations Through Campus Surveys

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Although the landscape of higher education is rapidly changing, “Seven Principles for Good Practice in Undergraduate Education” has been considered as one of the best known set of student engagement indicators (Chickering & Gamson, 1987). These principles include student-faculty contact, cooperation among students, active learning, prompt feedback, time on task, high expectations, and respect for diverse talents and ways of learning. However, a single measurement cannot possibly capture the complexity of student learning outcomes. The University of North Dakota has therefore searched for more meaningful approaches to evaluating how well UND fosters student, male and female, learning and their engagement inside and outside of the classroom as well as the policies and practices that UND uses to induce students to take part in these activities.

The National Survey of Student Engagement (NSSE) survey has been conducted in 2000 and 2003 at UND campus to determine the extent to which first-year and senior students engage in educationally effective practice. As a survey, NSSE complements and extends existing research programs such as CIRP Freshman Survey which has been administered continuously at UND since 1967 to entering freshmen to probe new students’ characteristics, attitudes, behaviors, views, and expectations prior to beginning their collegiate experience.

UND has administered the Higher Education Research Institute (HERI) Faculty Survey in 1995 and 2001 to determine its faculty issues including teaching practices, research activities, interaction with students and colleagues, perceptions of institutional climate, as well as job satisfaction. In

conjunction to the HERI Faculty Survey, the Faculty Survey of Student Engagement (FSSE) designed to parallel NSSE’s survey of undergraduate students was also pilot tested at UND in spring 2003. The results of the 2003 NSSE and FSSE allowed UND to measure male and female faculty expectations for student engagement in educational practices that are known to be empirically linked with high levels of learning and development.

The primary purpose of this study is to investigate the benchmarks of institutional performance by weaving together information from surveys to understand students’ learning experience and progress under different pedagogical approaches while comparing them with their national counterparts on an array of attitudinal and engagement issues. The additional information from faculty members at UND is then used to identify areas of strength as well as aspects which may warrant attention in the teaching and learning.

The likelihood of trends, differences, or the possible correlation between learning outcomes and personal development from these four national surveys will be identified on the basis of gender and class level, while accountability will be addressed in comparison with the national norm. The findings may help faculty and administrators understand the educational activities as well as guide strategic planning and assessment development.

Overall, this study illustrates the efficacy of, leads to improvement in, and also demonstrates the important role that Institutional Research at UND is playing directly in exploring the teaching and learning issues of gender equity and campus climate in different dimensions.

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Good Practice in Undergraduate Education (Chickering & Gamson, 1987)

1. encourages contact between students and faculty,
2. develops reciprocity and cooperation among students,
3. encourages active learning,
4. gives prompt feedback,
5. emphasizes time on task,
6. communicates high expectations, and
7. respects diverse talents and ways of learning.

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Student Assessment Surveys

A. Entering Freshmen

- CIRP Freshman Survey
- Noel-Levitz College Student Inventory (CSI)

B. Enrolled Undergraduate

- HERI Your First College Year (YFCY)
- National Survey of Student Engagement (NSSE)
- Noel-Levitz Student Satisfaction Inventory (SSI)
- Sophomore Satisfaction Survey
- Graduating Students Survey-seniors
- Housing Satisfaction Survey

C. Alumni

- Placement Survey
- ACT Alumni Outcomes Survey

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Changes in the Educational Levels of Parents of Entering Freshmen, 1993-2002

Highest level attained	Mother		Father	
	1993 UND	2002 UND	1993 UND	2002 UND
Graduate degree	9%	10%	14%	15%
College degree or higher	60%	67%	55%	62%
High school or less	31%	23%	31%	23%

Based on CIRP 2002, 32% of the Freshmen have been first generation college students and 37% have been second generation college students

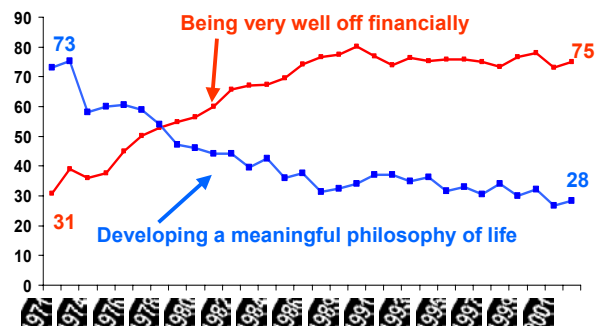
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Changes in Aspirations for Advanced Degrees by Gender, CIRP 1993-2002

Highest level attained	Female Freshmen			Male Freshmen		
	1993	2002	Relative % change	1993	2002	Relative % change
Bachelor	40%	37%	-8%	45%	53%	+18%
Masters	36%	31%	-14%	35%	28%	-20%
Doctorate	8%	9%	+13%	7%	6%	-14%
Medical	9%	16%	+78%	7%	9%	+29%
Law	3%	6%	+100%	4%	3%	-25%

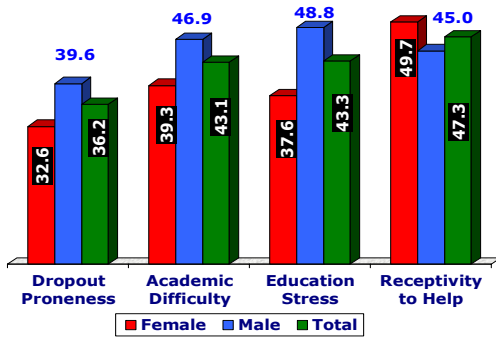
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Contrasting Value Trends, CIRP 1971-2002



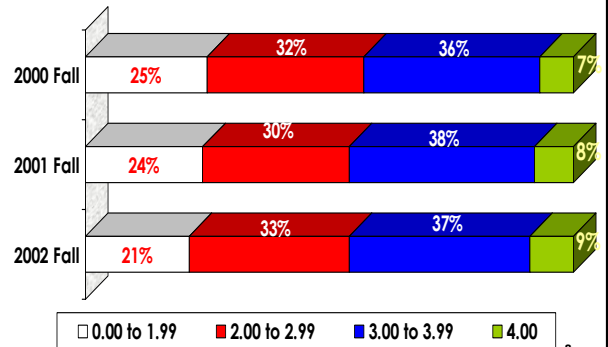
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CSI Summary of Academic Motivation by Gender



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Freshmen Fall Term GPA Range



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What is Student Engagement?

- Represents two important aspects of collegiate quality:
 1. The amount of time and effort students put into their studies and other meaningful academic activities
 2. How the institution deploys resources and organizes its curriculum and other learning opportunities
- Correlates with student learning and retention

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National Survey of Student Engagement (NSSE)

- NSSE selects the sample, and reports outcomes includes an equal number of first-year and senior students that are selected randomly.
- NSSE measures quality and satisfaction for activities that positively relate to student learning and development.

Information Collected from the Survey

1. demographic characteristics
2. assessment of academic challenge
3. engagement in learning activities
4. interaction with faculty
5. educational experiences
6. ratings of campus environment
7. progress toward learning goals
8. satisfaction with college

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First-year student data can be used to target areas for improvement early in the education process while Senior student data provides a broad educational experience view to gauge progress and future needs.

- Three-fourths (78%) of first-year students and over half (58%) of seniors said their classes emphasized memorization to a substantial degree.
- About four-fifths (88%) of first-year students and seniors (92%) would attend UND if they were starting college again.

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How Engaged Are UND Students?

What percent of UND students spent 10 hours or less per week preparing for class?

54% - Freshmen (45% at DOC-I)
47% - Senior (46% at DOC-I)
51% - Male
49% - Female

What percent of UND students have never talked to faculty about readings outside of class?

46% - Freshmen (45% at DOC-I)
31% - Senior (29% at DOC-I)
35% - Male
40% - Female

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How Engaged Are UND Students?

% in often and very often	Freshmen	Senior	Male	Female
Communicated with classmates online to complete academic work	42% (57%)	62% (65%)	59%	40%
Expressed ideas to a professor via email that you did not feel comfortable saying in class	16% (28%)	28% (30%)	16%	22%
How often do your instructors use information technology in the classroom	83% (70%)	76% (70%)	87%	76%

Five Benchmarks of Effective Educational Practice

Clusters of related activities, institutional actions, attitudes, and perceptions

1. Level of Academic Challenge
2. Active and Collaborative Learning
3. Student Interaction with Faculty Members
4. Enriching Educational Experiences
5. Supportive Campus Environment

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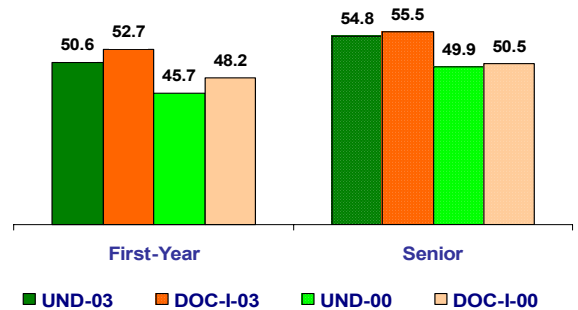
1. Level of Academic Challenge

Items on this benchmark include:

- Level of preparation for class
- Number of assigned books
- Number of written papers of varying length
- Types of cognitive demands emphasized by coursework

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Level of Academic Challenge



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2. Active and Collaborative Learning

Items on this benchmark include:

- Contributions to class discussions
- Class presentations
- Work with other students on projects
- Frequency of discussions about readings outside of class

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3. Student Interaction with Faculty Members

Items on this benchmark include:

- Frequency of discussions with faculty on
 - a. Grades
 - b. Assignments
 - c. Career plans
 - d. Readings
- Promptness of feedback
- Participation in research projects

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4. Enriching Educational Experiences

Items on this benchmark include:

- Participation in co-curricular activities
- Involvement in community service
- Participation in internships and co-ops
- Enrollment in capstone courses
- Study abroad

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5. Support Campus Environment

Items on this benchmark include:

- Perceived support to succeed academically
- Perceived support to thrive socially
- Perceived quality of relationships with:
 - a. Other students
 - b. Faculty
 - c. Administrators

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Other Important Findings

1. Self-Reported Hours Per Week Spent Preparing for class
2. Quality of Advising
3. Satisfaction with One's Educational Experience

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Faculty Survey of Student Engagement (FSSE)

- FSSE is designed to measure faculty expectations for student engagement in educational practices that are empirically linked with high level of learning and development.
- FSSE results can be used to identify areas of strength as well as aspects of the undergraduate experience that may warrant attention. This information is intended to be a catalyst for productive discussions related to teaching, learning, and the quality of students' educational experience.

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Connect NSSE with FSSE

Very much and often	FY	SR	LD	UD
Memorizing	78%	58%	49%	23%
Analyzing	73%	82%	79%	86%
Synthesizing	55%	71%	68%	77%
Making judgment	58%	65%	60%	67%
Applying	72%	78%	70%	79%

Questions and Discussion



For more information:

About presentation material:

<http://www.und.nodak.edu/dept/datacol/presentations/index.htm>

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