

**Developing an Integrative, Inclusive  
Framework For Undergraduate Assessment:  
Supporting Data Managers & Decision-  
Makers At A Decentralized University**

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**UNIVERSITY OF MINNESOTA**

**Driven to Discover<sup>SM</sup>**

**American Evaluation Association Conference, 2012**

# University of Minnesota-Twin Cities

- Founded 1851: Land grant university
- Enrollment:
  - 30,375 undergraduate
  - 13,124 graduate
  - 3,824 professional studies
  - 4,530 non-degree
- 22,523 employees
- Campuses in Minneapolis and St. Paul



## Decentralization

Highest Undergraduate Populations:

CLA: 14,172

CSE: 5,098

CEHD: 2,399

CSOM: 2,334

CFANS: 1,993

	UG	GR	PRO
Carlson School of Management	X	X	
Center for Allied Health	X	X	
College of Education & Human Development	X	X	
Col. of Food, Agriculture & Natural Resource Science	X	X	
College of Continuing Education	X	X	
College of Biological Sciences	X	X	
College of Design	X	X	
College of Liberal Arts	X	X	
College of Pharmacy		X	X
College of Science & Engineering	X	X	
College of Veterinary Medicine		X	X
Humphrey School of Public Affairs		X	
Law School			X
Medical School	X	X	X
School of Dentistry	X	X	X
School of Nursing	X	X	
School of Public Health			



# Anarchical University



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# Anarchical University

- Bounded rationality
- Cannot give attention to the infinite number of elements that exist in the environment
- Problematic goals
- Unclear technologies
- Fluid participation (Birnbaum, 1988)



# Decisions in an Organized Anarchy

Garbage can decision process:

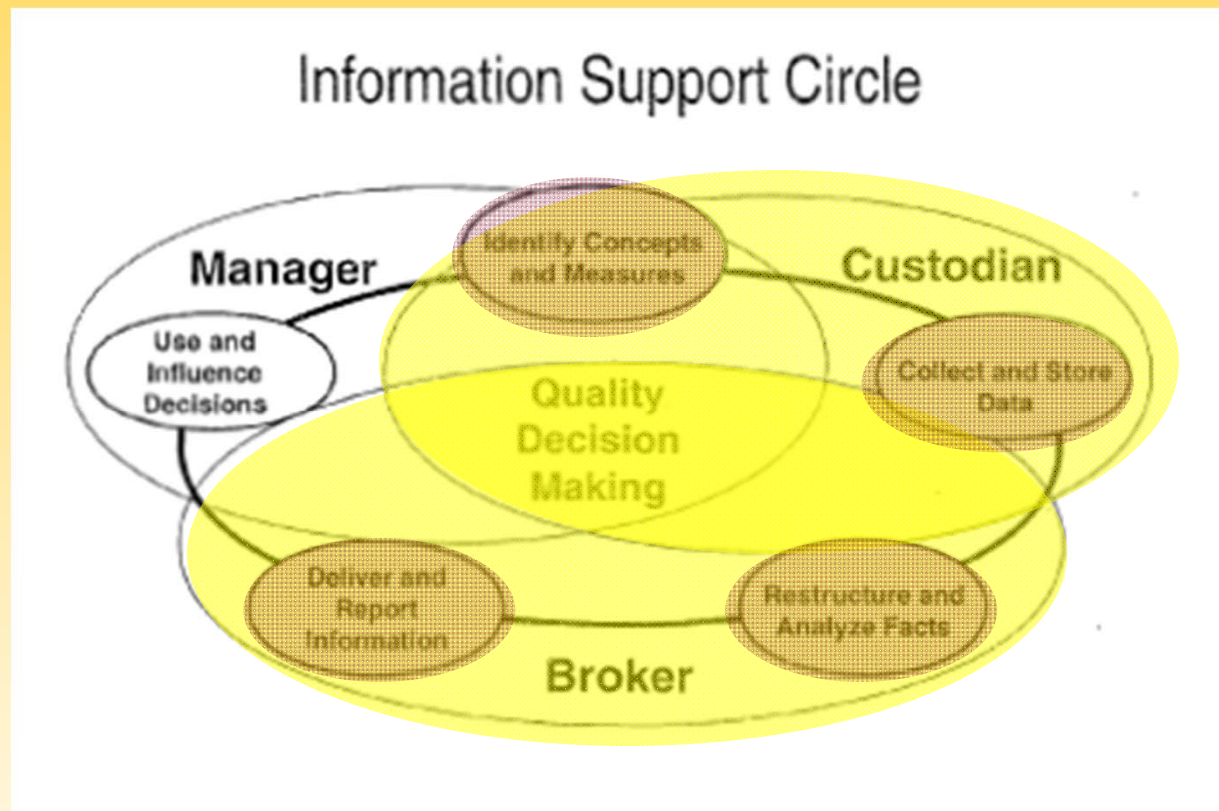
- Problems
- Solutions
- Participants
- Choice opportunities
- Tight coupling

Decision styles:

- Resolution
- Flight
- Oversight



# Providing Data to Decision-Makers



Source: McLaughlin, G. W., Howard, R. D., Cunningham, L. B., Blythe, E. W., & Payne, E. (2004). *People, processes, & managing data* (2nd ed.). Tallahassee, FL: Association for Institutional Research.



# Identify Concepts and Measures

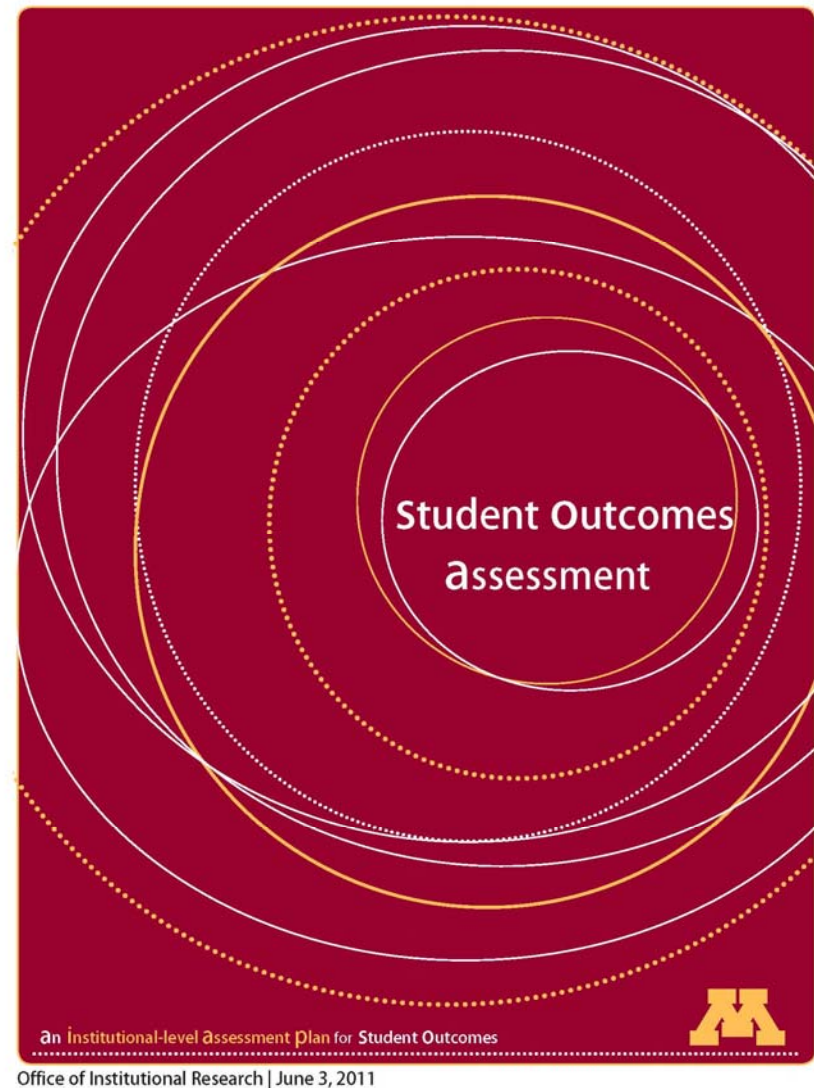
- Develop a conceptual model
- Include measurements
- Identify key stakeholders
- Define essential requirements required to make decisions





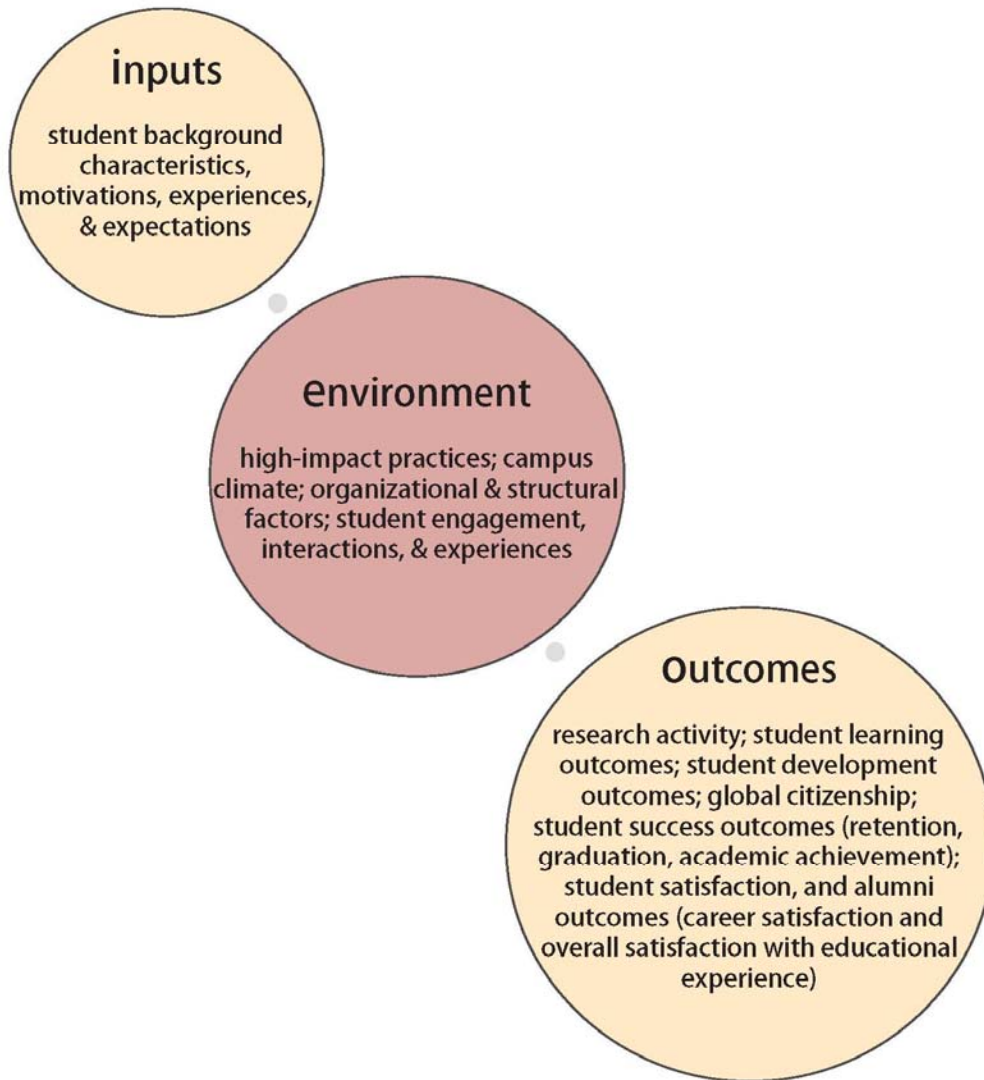
# Assessment Plan

- Displayed on OIR website
- Grounded in higher education research & theory



## conceptual framework

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# Developed Conceptual Framework



## stakeholders, primary intended users & audience

Bresciani, Gardner, & Hickmott (2009) emphasize the importance of involving stakeholders in assessment activities, acknowledging that “outcomes-based assessment requires the involvement of many to ensure that assessment efforts do not fall by the wayside once the data collection and interpretation of results are complete” (p. 71). Additionally, taking steps to identify and involve stakeholders will “contribute to increased acceptance of the assessment process in general, which will affirm organizational commitment to evidence-based decision making to improve student learning and success” (Bresciani, Gardner, & Hickmott, 2009, p. 71).

We have identified several important stakeholders who will contribute to and ultimately benefit from this process of assessment. Their diverse opinions and views shape the ways in which the assessment plan was conceptualized. Since we consider stakeholders to be a larger group of individuals who benefit widely and generally from the assessment process, results, and subsequent improvements, we consider a broad group of stakeholders to include undergraduate students, faculty, staff, administrators, the campus community, and the State of Minnesota.

The primary intended users of the assessment plan include UMNTC administrators who can utilize the data collection, scholarship, and assessment to frame decisions, support student development, enhance student retention and graduation, and benchmark our relative standing with our peer institutions. The primary intended users include

- Undergraduate Education
- Associate Deans
- Accreditation Coordinator
- Faculty Affairs
- Student Affairs
- Equity and Diversity
- Office of Planning and Analysis
- Public Engagement

Additionally, while not directly involved in the assessment process, as their concerns center more on graduate students and alumni, we have identified secondary intended users who may indirectly benefit or utilize the results of institutional-wide undergraduate assessment:

- Foundation and Alumni Association
- Graduate School
- Academic Health Center



# Identified Stakeholders

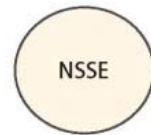
## description of data collection instruments

Bresciani, Gardner, and Hickmott (2009) acknowledge that, “when engaging in institutional assessment, it is imperative that validity and reliability are ensured” (p. 57). Many nationally-recognized and administered survey instruments are designed to be reliable (meaning that the measure produces the same results over time) and valid (meaning that the tools are designed to accurately measure what is appropriate). As a result, we recommend continual use of the following instruments to collect information on student outcomes:



### Cooperative Institutional Research Program Freshman Survey

(administered nationally, with UMNTC participating every other year)  
The CIRP freshman survey project is aimed at providing information on the characteristics and educational goals and aspirations of first-time college students. The data provide information on changes in the characteristics of freshmen and form the baseline for conducting longitudinal studies of important student outcomes issues. Since a number of other public universities participate in the project, the data also provide comparisons of UMNTC freshmen to those from other institutions. UMNTC has participated every other year since 1991. The survey is sponsored and administered by Orientation and First Year



### National Survey of Student Engagement

(administered nationally—UMNTC participates every other year)  
This national survey project focuses on the characteristics of student engagement and aims to develop national benchmarks. The survey was first administered at UMNTC in the spring of freshmen and seniors and provides a level of effectiveness of undergraduate program experience. UMNTC participates in the survey every other year with consortium participants. The survey is sponsored by the Office of Institutional Research



### Student Experience in the Research Universities

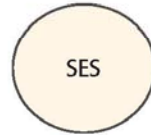
(annual survey to all nine University of Minnesota research universities)  
This survey project began as a vehicle to generate institutional and comparative data and to encourage systematic use of data and institutional self-improvement. Surveyed by Student Affairs, Equity and Diversity and the Office of Institutional Research



### Graduate Exit Survey

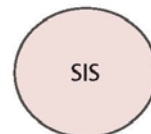
Locally developed survey sponsored by the Office of Institutional Research. The survey focuses on current job and educational assessment of their educational experience.

## description of data collection instruments



### University of Minnesota Student Experiences Survey

(administered locally every other year)  
In-house developed survey sponsored by the office of Undergraduate Education, the survey is administered to a stratified random sample of undergraduate, graduate and professional students historically across the system focusing on educational and social experiences and satisfaction. Twin Cities will continue portions of the UMSE within the optional item section of the SERU to undergraduates. The UMSE will continue to be administered on coordinate campuses. Continuation of UMSE with graduate and professional students is under review.



### University of Minnesota Student Interest Survey

(administered locally every five years)  
Roger Harrold created the Student Interest Survey, and has provided leadership in its administration to random samples of students at five-year intervals since 1971. The year 2006 marked the eighth administration of the survey and was a joint project of five University units. The Office for Student Affairs, Department of Recreational Sports, and Student Unions & Activities funded the project, and the Office of Institutional Research administered the survey and prepared the data for analysis.

# Identified Assessments

# Collect and Store Data

- Obtain qualitative and quantitative data
- Store data so they are accessible
- Develop data definitions and descriptions
- Use technology where appropriate




# Structuring and Showcasing Data

Office of Planning & Analysis      Student   HR   Tuition & Finance   Surveys   Planning Metrics   Papers & Publications   Staff


## Office of Institutional Research


### Student Data

[Official Enrollment Statistics](#)  
[New Freshman Characteristics](#)  
[Freshman Graduation / Retention](#)  
[More...](#)






### Human Resource Data

[Employee Headcounts](#)  
[Employee and Student Head Counts/Credit Hours for Fall 2011](#)   
[More...](#)




### Tuition & Finance Data

[President's Operating Budget Plan 2012-13](#)   
[Tuition Rates 2012-13](#)   
[More...](#)




### Surveys & Assessment

[Stdnt Experience in the Research U \(SERU\)](#)  
[Nat'l Survey of Stdnt Engagemnt \(NSSE\)](#)  
[Recent Graduate Survey](#)  
[More...](#)




### Planning Metrics

[Annual Measurement of Progress](#)  
[Institutional Planning Profile](#)  
[More...](#)



### Papers & Publications


[NACADA 2012 - Presentations](#)  
[AIR 2012 - Presentations](#)  
[More Papers & Presentations... Publications](#)







### Released: Summer 2012 Enrollment


Posted By: David Peterson on 09/05/2012 (Item 2 of 3)

The University of Minnesota Official Enrollment Statistics for the Summer 2012 term have been released. The overall enrollment stood at 19,292 which is down from last summer. This is due to a decrease in graduate and non-degree students. Undergraduate enrollment...

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# Showcasing Data

## Office of Institutional Research

[Home](#) < [Student](#)

### Official Enrollment Statistics: Fall 2012

This is the first iteration of the new Official Enrollment Statistics Report. The report is now web-based as opposed to static PDF documents. The data are presented graphically by term or five-year trends. The [historic enrollment \(STIX\) reports](#) for terms Fall 1999 - Summer 2010 will remain available. The new format includes data back to Fall 2001. If you would like to combine or cross a number of variables seen below, you could try the more flexible [Enrollment Pivot report](#). [May Session](#) enrollment is reported separately.

View the [data load table](#) for details on the scheduled updating and staff contact for these data.

Select another term:

#### Fall 2012 Headcount Data

- [Academic Level](#)
- [Registration Status](#)
- [Class](#)
- [Credit Load](#)
- [Full-Time/Part-Time Status](#)
- [Gender](#)
- [Race/Ethnicity](#)
- [Race/Ethnicity \(Multi\)](#)
- [Students of Color](#)
- [Age](#)
- [Home Location](#)
- [Tuition Residency](#)
  
- [All of the above on one page](#)

#### Fall 2008-2012 Trend Data

- [Academic Level](#)
- [Registration Status](#)
- [Class](#)
- [Credit Load](#)
- [Full-Time/Part-Time Status](#)
- [Gender](#)
- [Race/Ethnicity](#)
- [Students of Color](#)
- [Age](#)
- [Home Location](#)
- [Tuition Residency](#)



# Showcasing Data & Definitions

Select Level: Undergraduate [Show/Hide Notes & Data Sources](#)

Campus	College	Freshman	Sophomore	Junior	Senior	Unknown	Total
Crookston	Univ of Minnesota, Crookston	337	341	420	704	0	1,802
<b>Crookston</b>	<b>Total</b>	<b>337</b>	<b>341</b>	<b>420</b>	<b>704</b>	<b>0</b>	<b>1,802</b>
Duluth	College of Liberal Arts	567	430	392	488	0	1,877
	Continuing Education	0	0	0	7	0	7
	Education & Human Service Pro	423	497	463	716	0	2,099
	Labovitz School of Bus & Econ	387	420	514	567	0	1,888
	School of Fine Arts	117	126	128	200	0	571
	UMD-Sci & Eng. Swenson Coll of	733	730	674	873	0	3,010
<b>Duluth</b>	<b>Total</b>	<b>2,227</b>	<b>2,203</b>	<b>2,171</b>	<b>2,851</b>	<b>0</b>	<b>9,452</b>
Morris	Univ of Minnesota Morris	468	471	374	475	0	1,788
<b>Morris</b>	<b>Total</b>	<b>468</b>	<b>471</b>	<b>374</b>	<b>475</b>	<b>0</b>	<b>1,788</b>
Rochester	Center for Learning Innovation	138	102	73	72	0	385
<b>Rochester</b>	<b>Total</b>	<b>138</b>	<b>102</b>	<b>73</b>	<b>72</b>	<b>0</b>	<b>385</b>
Twin Cities	Carlson School of Management	439	531	588	776	0	2,334
	Center for Allied Health	0	1	24	99	0	124
	Col of Educ/Human Development	504	431	656	808	0	2,399
	Col of Food, Agr & Nat Res Sci	327	403	510	753	0	1,993
	Coll of Continuing Education	10	40	137	366	0	553
	College of Biological Sciences	277	406	434	714	0	1,831
	College of Design	262	279	336	503	0	1,380
	College of Liberal Arts	2,685	3,291	3,500	4,696	0	14,172
	College of Sci & Engineering	602	983	1,117	2,396	0	5,098
	Medical School	0	3	18	38	0	59
	School of Dentistry	1	0	10	43	0	54
	School of Nursing	1	61	110	206	0	378





# Showcasing Data & Definitions

Freshman. Class level designation for first-year student in undergraduate programs.

Sophomore. Class level designation for second-year student in undergraduate programs.

Junior. Class level designation for third-year student in undergraduate programs.

Senior. Class level designation for fourth-year or later student in undergraduate programs.

Unknown. Not available. Information that could not be obtained from the student's record or the record did not fit into one of the above categories.

Masters. Class level designation for students in a master's program.

Doctoral. Class level designation for students in a doctoral program.

Other Grad. Graduate students who are not in a master's or doctoral program, but are pursuing a degree.

1st Yr. Class level designation for first-year student in professional programs.

2nd Yr. Class level designation for second-year student in professional programs.

3rd Yr. Class level designation for third-year student in professional programs.

4th Yr. Class level designation for fourth-year student in professional programs.

Other Prfl. Class level designation for special case professional programs including Pharmacy, Medical Residency Students, etc.

Non-Degree. Class level designation for any student in a non-degree program.



# Survey Data



The **Student Experience in the Research University (SERU)** Project is a collaboration between academic scholars and institutional researchers devoted to creating new data sources and policy relevant analysis to help broaden our understanding of the undergraduate experience and to promote a culture of institutional self-improvement.

The University of Minnesota participated in this national study about undergraduate students in 2009, 2010 and 2012. The SERU is conducted by the Center for Studies in Higher Education at the University of California Berkeley. More information about the SERU and the SERU consortium can be found at: <http://www.seru.umn.edu/>

The University of Minnesota received responses from approximately 9,600 students (~34% response rate) in 2010 and approximately 9,100 students (~32% response rate) in 2012. The data is presented as a distribution for each possible response, so the the columns should be considered a percentage unless noted otherwise. The final column is the number of students who provided a valid response for each question.

Your account has SERU Administrator access. This means you have access to the [SERU Administrator results](#), which offers more data points and further ability to drilldown and the [2012 SERU Wild Card results](#), which are the web based reports for the University of Minnesota specific wild card module.

## Educational Experience

- [Time Allocation: Academic/Professional](#)
- [Time Allocation: Personal](#)
- [Hours of Sleep](#)
- [Academic Improvement](#)
- [Self Improvement](#)
- [Campus Climate for Diversity](#)
- [Academic Engagement: Class and Studying](#)
- [Academic Engagement: Faculty Interaction](#)
- [Academic Engagement: Challenging Self](#)
- [Course Reading Completion](#)
- [Post-Graduation Plans](#)
- [Career Aspirations](#)
- [Academic Aspirations](#)
- [Research and Creative Activities](#)
- [Overall Satisfaction](#)
- [Sense of Belonging](#)

## Major/Educational Experience Evaluation

- [Deciding on a Major](#)
- [Required Effort](#)
- [Own Effort](#)
- [Academic Policies](#)
- [Satisfaction: Courses in Major](#)
- [Satisfaction: Academic Advising](#)
- [Satisfaction: Instruction](#)
- [Satisfaction: Resource Availability, Access, Opportunities](#)
- [Professor Rapport](#)

## Student Demographics

- [Debt Concerns](#)
- [Meeting Collegiate Expenses](#)
- [Fiscal Behavior](#)
- [Is University Cost Managable](#)
- [Born in the US?](#)
- [English Knowledge](#)
- [Family Origin](#)
- [Socioeconomic Background](#)
- [Income Range: Dependent Students](#)
- [Income Range: Independent Students](#)
- [Religious & Spiritual Preference](#)
- [Political Orientation](#)
- [Sport Activities](#)

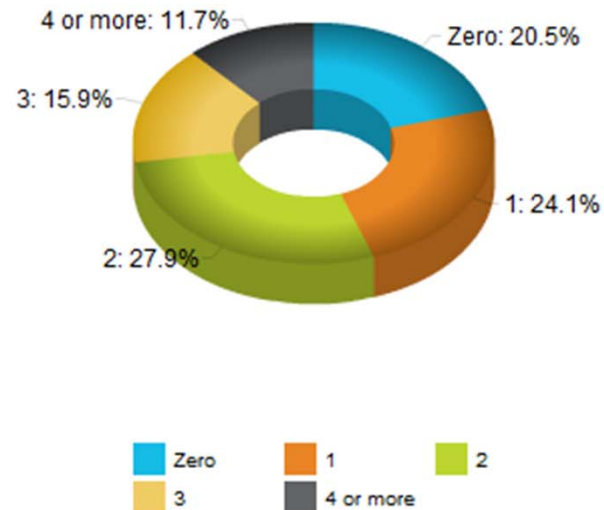


# Dynamic Survey Data

## SERU Results: Professor Rapport

How many professors do you know well enough to ask for a letter of recommendation in support of an application for a job or for graduate or professional school?

Term: Spring 2012 College: All Colleges Data Breaks: None



Response Options	N	%
Zero	1,240	20.5
1	1,455	24.1
2	1,688	27.9
3	959	15.9
4 or more	705	11.7
<b>Total</b>	<b>6,047</b>	<b>100.0</b>

Notes & Data Sources:

# Restructure and Analyze Facts

**UMatter**  
Student Experience in the Research University survey

Home | Students and U Community | Staff & Administration | Research | About SERU | News & Highlights

### Students

**When does it start?**  
The SERU survey administration is complete for 2012 as of July 9th.

**Why respond?**  
We want to know how things are going for you, because U Matter! Your survey responses will help:

- » Improve existing student services
- » Create new services
- » Enhance the student experience
- » [Find out more...](#)

**2012 Response Rates**

UMN	██████████
CSE	██████████
CLA	██████████

### Staff & Administration

**Promoting the survey**  
Create personalized messages for your students by using resources from our U Matter SERU communications toolkit.

» [Find out more...](#)

**Utilizing the data**  
The SERU survey offers a wealth of data all campus community members can use.

» [Find out more...](#)

**Research questions**  
Do you have a burning question about the student experience?

### Word Cloud

Key words include: diversity, understand, different, campus, students, around, feel, community, important, everything, issues, global, opinions, learned, know, backgrounds, live, whole, countries, social, life, perspective, culture, realized, small, kind, Minnesota, friends, abroad, accepting, view, question, impact, learning, classes, place, study, realize, abroad, accepting, view, perspective, culture, realized, small, kind, Minnesota, friends, abroad, accepting, view, question, impact, learning, classes, place, study, realize, abroad, accepting, view.

### News & Highlights

**SERU survey closed.**  
Monday, 09 July 2012 (Item 1 of 3)

The SERU survey has closed for the 2011-2012 academic year.



# Restructure and Analyze Facts

## Qualitative Analysis

In the NSSE, students responded to the open-ended question, "If you have any additional comments or feedback that you'd like to share on the quality of your educational experience, please type them below." The data suggest that transfer students and new high school students share a few concerns in common; namely, students are concerned about academic advising, the size of the university, and the quality of courses. Students also jointly feel a tension between research and teaching mission of the university; however, transfer students who self-identified as nontraditional noted additional challenges on campus. The following sections discuss these areas in greater depth and are substantiated by students' comments, which were not edited for grammar or spelling.

## Academic Advising

A few transfer students noted that their academic advisors were unsympathetic to their experiences as nontraditional students on campus. Five transfer students wrote that, when I first started at this University I did not realize how unsympathetic advisors are about students needing to work.

Office hours are pretty awful when you have obligations outside of the course. With my Student Services Advisors, they seem able to understand that I have an extensive work background, and have helped me greatly in laying out my class load and timelines for graduation. However, my department advisor seems to have no understanding of non-traditional student challenges, and does not seem to take prior experience in the field into consideration.

If you want non-trad. students to feel welcome here, then there really needs to be extra counselors who specialize in helping them return to the classroom. The advisors at CSE were less than helpful when I expressed concern for my academic struggles. They had absolutely no idea what I was going through as an older student with outside obligations. So, they could lend very little help.

Transfer students also noted frustrations with advisors who seem to know much at the colleges, departments, or programs but little about other programs at the university. Some students felt as though they had received poor quality of advice from advisors. If the advisors were more in tune to the entire university, and not just their college, they would be more able to direct students in this situation to better academic paths, thus helping overall graduation rate at this university.

Also, my CLA adviser did not mention the honors program existed, so my initial advisor was missed. The advisor I had at the time was unwilling to help me and sent me to a lower division advisor, who attempted to return me to the lower division office. I was unable to attain the degree I sought originally and have had to settle for a waste of my time.

Academic advisers only know their department and are unable to give any help on other departments even if they are closely related.

Analysis | Office of Institutional Research

## Benchmarking

The data suggest that transfer students at the University of Minnesota-Twin Cities report statistically significant ( $p < .05$ ) higher scores as compared to transfer students at other AAU institutions on the following factors: academic disengagement, extracurricular engagement, poor academic habits and nonacademic motivations. The difference for academic engagement is moderate in size (Table 17).

Table 17

Differences Between Transfer Students at AAU Institutions and the University of Minnesota-Twin Cities on Factor Scores

Factor	Other AAU Institutions			UMNTC			F
	M	SD	n	M	SD	n	
Factor 7: Academic disengagement	5.10	1.59	14935	5.43	1.46	2003	94.89***
Factor 7a: Extracurricular engagement	5.54	1.59	14971	5.80	1.43	2618	65.24***
Factor 7b: Poor academic habits	4.44	1.43	13771	4.58	1.36	2340	13.81***
Factor 7c: Nonacademic motivations	4.99	2.03	13843	5.25	1.79	2334	33.28***

The data suggest that transfer students at the University of Minnesota-Twin Cities report statistically significant ( $p < .05$ ) higher scores as compared to transfer students at other AAU institutions on the following factors: use of time and time employed. These differences are moderate (Table 18).

Table 18

Differences Between Transfer Students at AAU Institutions and the University of Minnesota-Twin Cities on Factor Scores

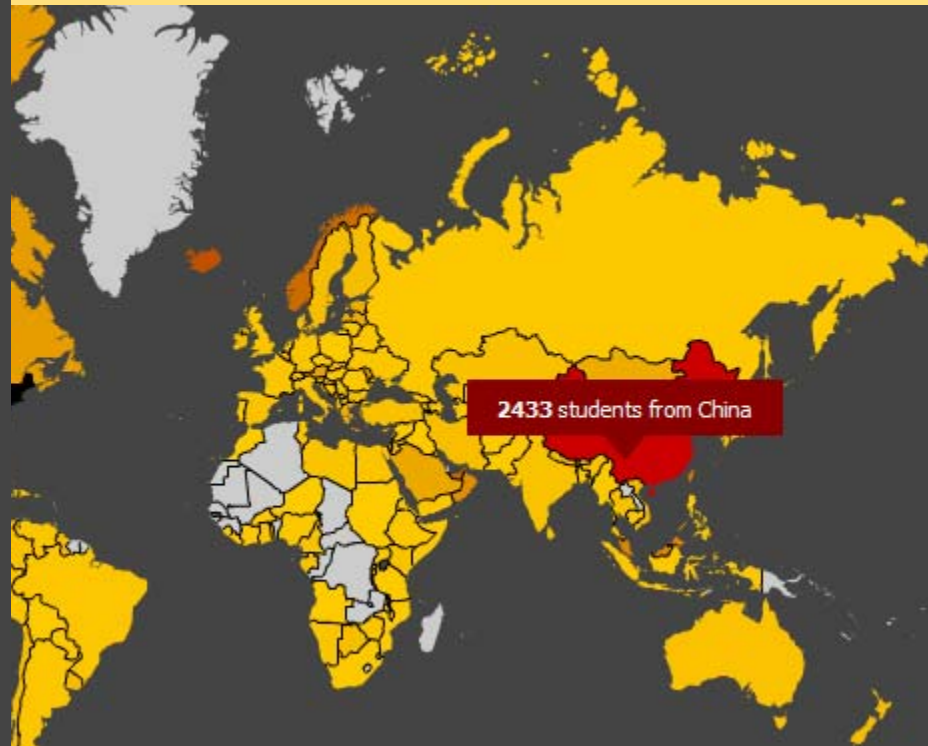
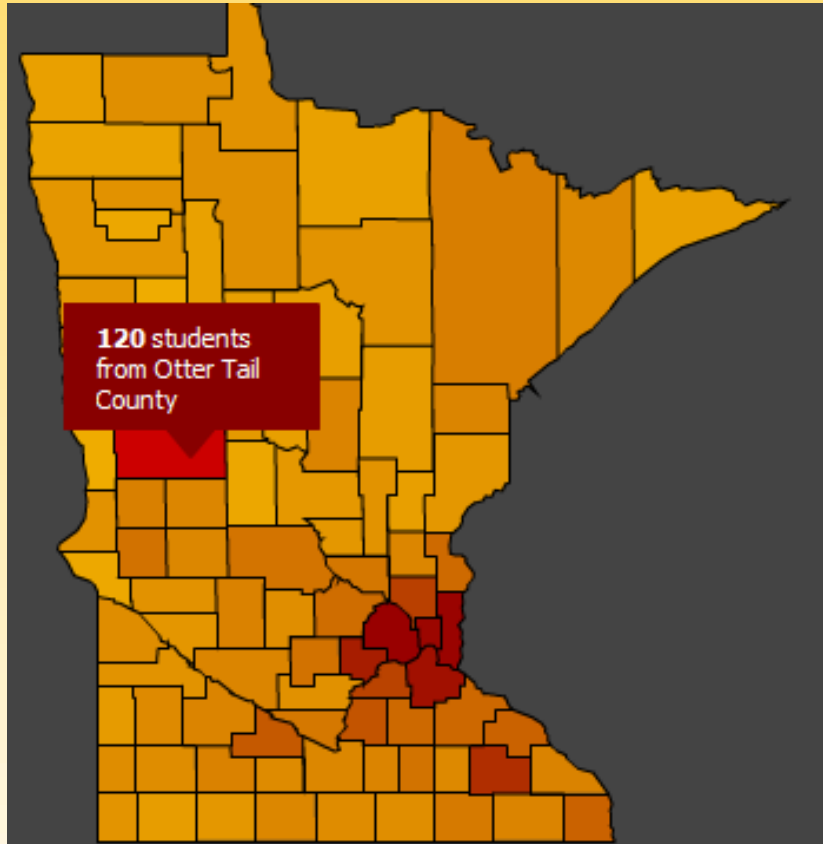
Factor	Other AAU Institutions			UMNTC			F
	M	SD	n	M	SD	n	
Factor 1: Use of time (academic and employment)	4.67	1.70	15054	5.17	1.74	2586	183.44***
Factor 1a: Time employed	4.51	1.63	14778	5.10	1.75	2803	276.79***



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# Restructure and Analyze Facts



# Deliver and Report Information

## Summary of Research

### Examples of research studies

The Office of Institutional Research has engaged in a number of formal research studies using SERU data. A few examples of these presentations, reports, or analyses are highlighted below.

- [UMNTC first-year students' academic engagement](#)
- [First-generation students' academic engagement](#)
- [Impact of first-year learning communities](#)
- [Using social class data in institutional research](#)
- [High impact practices and underrepresented minority STEM students' aspirations to graduate education](#)
- [Immigrant students' sense of belonging at large public research universities](#)
- [Community-engaged learning and academic gains](#)

Forthcoming publications using SERU data will appear in the following journals:

- [NACADA Journal of Academic Advising](#)
- [Journal of College Orientation and Transition](#)
- [Journal of College Student Retention](#)
- [The Learning Assistance Review](#)
- [Journal of College Counseling](#)
- [Multicultural Teaching and Learning](#)
- [Teaching in Higher Education](#)

SERU data has also been highlighted at the following local, national, and international conferences:

- [Internationalizing the Curriculum and Campus Conference](#)
- [31st Annual Conference on the First-Year Experience](#)
- [International Association for Research on Service-learning and Community Engagement \(IARSCLE\)](#)
- [Association for Institutional Research in the Upper Midwest \(AIRUM\)](#)
- [American College Personnel Association \(ACPA\)](#)
- [Association for Institutional Research \(AIR\) Forum](#)

### Recent Research Projects



#### Major Decisions: Implications for Engagement, Satisfaction, and Belonging

Krista M. Soria &  
Michael J. Stebleton

2012 Title Academic Advising Conference  
March 6, 2012



#### Extended Orientations: Enhancing the Sense of Belonging of First-Year Students

University of Minnesota, Twin Cities  
Krista Soria | Office of Institutional Research  
Beth Lingren Clark | Orientation & First-Year Programs  
Laura Coffin Koch | Undergraduate Education



#### A Snapshot of Undergraduate Data at the U of M



Academic Advising Network  
December 8, 2011

Ron Huesman  
Associate Director, Office of Institutional Research

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# Deliver and Report Information

- Wide variety of reports—appeal and reach out to a variety of stakeholders
- Publication—advances research mission and promotes world class status of programs
- Conferences—generate new ideas and connect with others



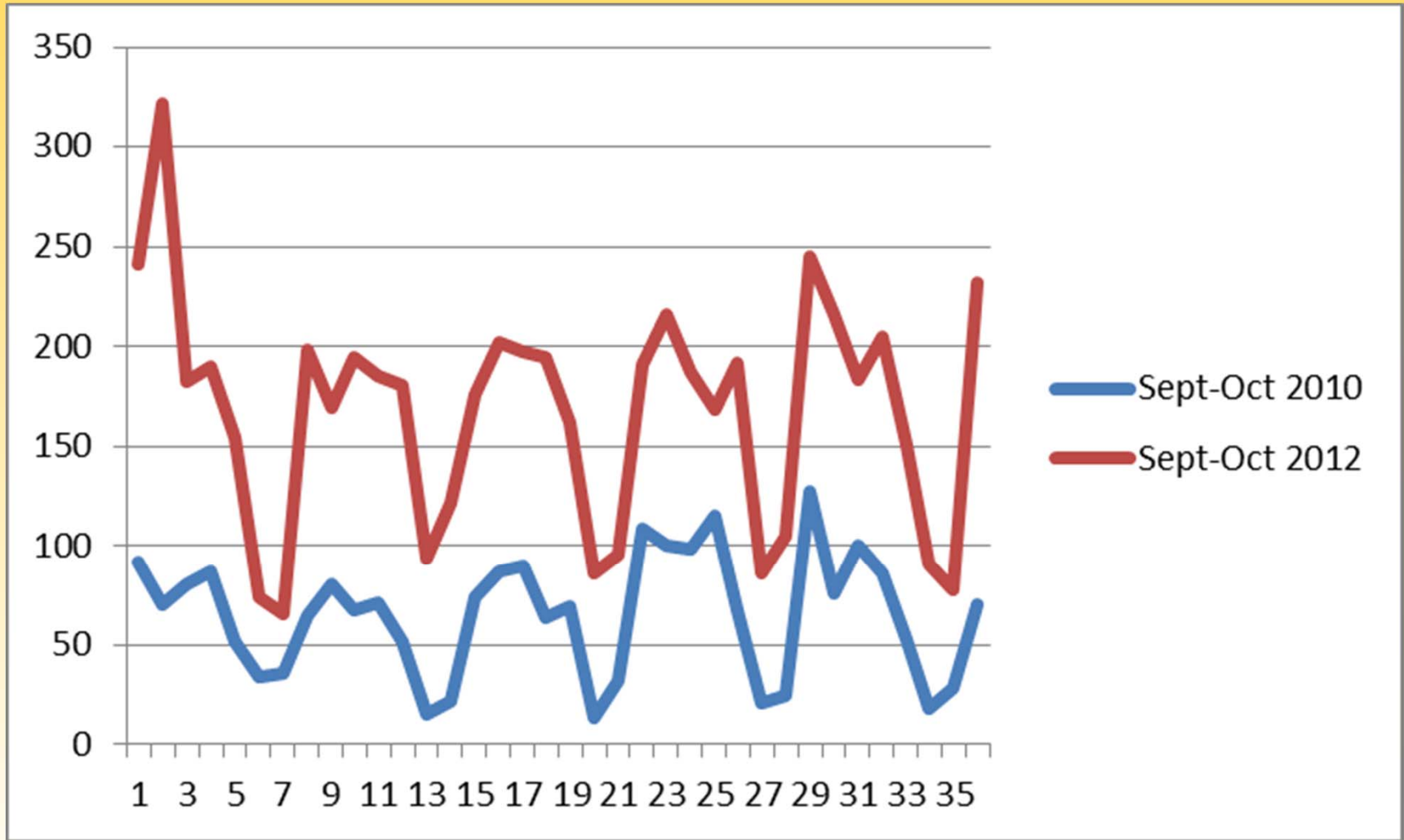


# Results

- December 1, 2011 to February 29, 2012 (90 days)
- 11,032 visits from 7,933 visitors
- 70% increase from the period one year earlier



# Visits Per Day in One Month



# SERU Site

- Feb. 1, 2012 to Oct. 23, 2012
- 2,789 unique visitors visited the site
- 6,593 page views



# Results Summary

- Synthesized data collection efforts
- Provided more open access to data for stakeholders' decision making
- Enhanced transparency of data results and data collection
- Increased capacity of stakeholders to make informed decisions



# Thank you!

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