

# Institutional Dashboards: Navigational Tools for Colleges and Universities

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# Management Reporting Tools

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- Balanced Scorecard
- Baldrige 7 Quality Criteria
- Strategic Performance Measures
- Six Sigma
- Performance Indicators
- Dashboard Indicators

# Definition

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Dashboard \ 'dash-,bo(ə)rd\ n

- 1: a panel extending across an automobile, airplane, or motorboat below the windshield and usually containing dials and controls (Webster)
- 2: a group of financial indicators and other operational outcomes measures that reflect key elements of an entity's strategic direction used to "navigate" the organization, much in the same way a pilot uses the array of indicators in the cockpit to monitor and navigate an airplane. (Doerfel & Ruben, "Developing more adaptive, innovative and interactive organizations", *New Directions for Higher Education*, no. 118, 2002.)

# Our Definition

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- A one to two page document that presents critical information (indicators) in a succinct, easily understood, visually appealing format. A tool used to inform viewers of the current state of affairs, to provide information to evaluate performance and to help decision makers move an institution forward. (Terkla, 2005)

# Methodology

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- 66 dashboards
- Google Search
- On-line request
  - Electronic Air
  - NEAIR List Serve
  - SAIR Newsletter
  - HEDS List Serve

# Important Aspects

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- Only the most important indicators
- Operationally focused – tied to mission/strategic plan
- Easy to comprehend – instant visual impact
- Number of indicators varies greatly (3 to 68)
- Grouped measures into 11 broad categories
- Within categories – subgroups with 6 to 100 indicators

# Developing List of Indicators

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- What information will help us measure progress?
- Who will provide input in determining appropriate indicators?

# Indicators

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- Financial
- Admissions
- Enrolment
- Faculty
- Student Outcomes
- Student Engagement
- Academic Information
- Physical Plant
- Satisfaction
- Research
- External Ratings



# Financial Indicators

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- 80% Endowment & Expense Data
  - Market value
  - Endowment per FTE
  - Endowment growth rate
- 73% Advancement
  - Alumni giving rate
  - Total gifts
  - Alumni gifts
- 64% Financial Aid Information
  - Tuition discount
  - % students receiving aid
  - % receiving institutional grants
- 47% Fees/Tuition Data

# Admissions Indicators

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- 79% Admissions Scores
  - Average SATs or ACTs
  - % in top 10 percent of high school class
  - Average high school GPA
- 71% General Admissions Data
  - Yield rate
  - Admit rate
  - Number of applications
- 21% Graduate Admissions Information
  - Graduate test scores
  - Admit rate

# Enrolment Indicators

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- 77% Enrolment Figures
  - Undergraduate enrolment
  - Graduate headcount
  - Number of new freshmen
- 72% Enrolment Figures special populations
  - % of minority students
  - % of international students
  - % of female/male students

# Faculty Indicators

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- 77% Faculty
  - FTE
  - % with terminal degrees
  - Average faculty salary by rank
- 33% Composition of Special Populations
  - % minority
  - % female/male
  - % female/male by tenure

# Student Outcomes

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- 73% Graduation Rates
  - 4, 5, & 6 year rates
- 71% Retention Rates
  - Freshmen retention rate
  - Fall to fall retention
- 41% Measures of Success
  - % employed
  - % going to graduate school
- 23% Completions & Awards
  - Number of degrees awarded
  - Number of students who graduated with special honors
- 15% Graduation Rates – Special Populations

# Student Engagement

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- 57.6% Student Engagement
  - % of students studying abroad
  - % of students writing honors thesis
  - % of students living on-campus

# Academic Information

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- 55% Student/Faculty Contact
  - Student-Faculty ratio
  - Number of classes < 20 students
  - Number of classes > 50 students
- 47% Academic Information
  - Number of fellowships
  - Number of course sections offered
  - ARL ranking of library

# Physical Plant

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- 38% Physical Plant Information
  - Plant reinvestment rate
  - Seats/station utilization
  - Space utilization



# Satisfaction

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- 35% Student Satisfaction
  - % Undergraduate satisfaction
  - Alumni satisfaction
  - Student satisfaction with instruction
- 11% Employer/Staff Satisfaction
  - Employer satisfaction
  - Employee satisfaction
  - Community satisfaction
- 5% Faculty Satisfaction

# Research

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- 35% Research Measures
  - Expenditures
  - Total research support
  - # of patents awarded
  - Total externally funded research

# External Ratings

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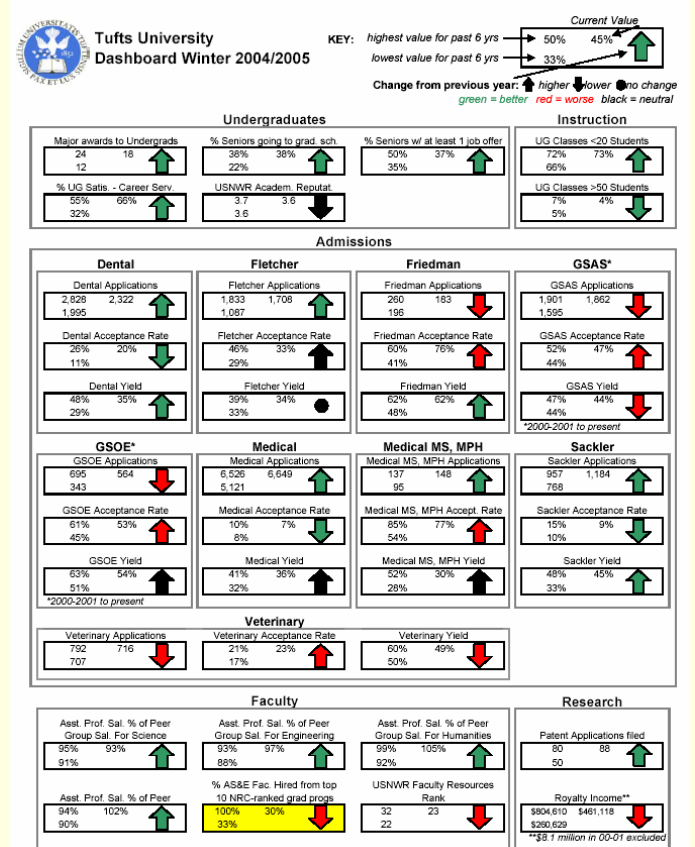
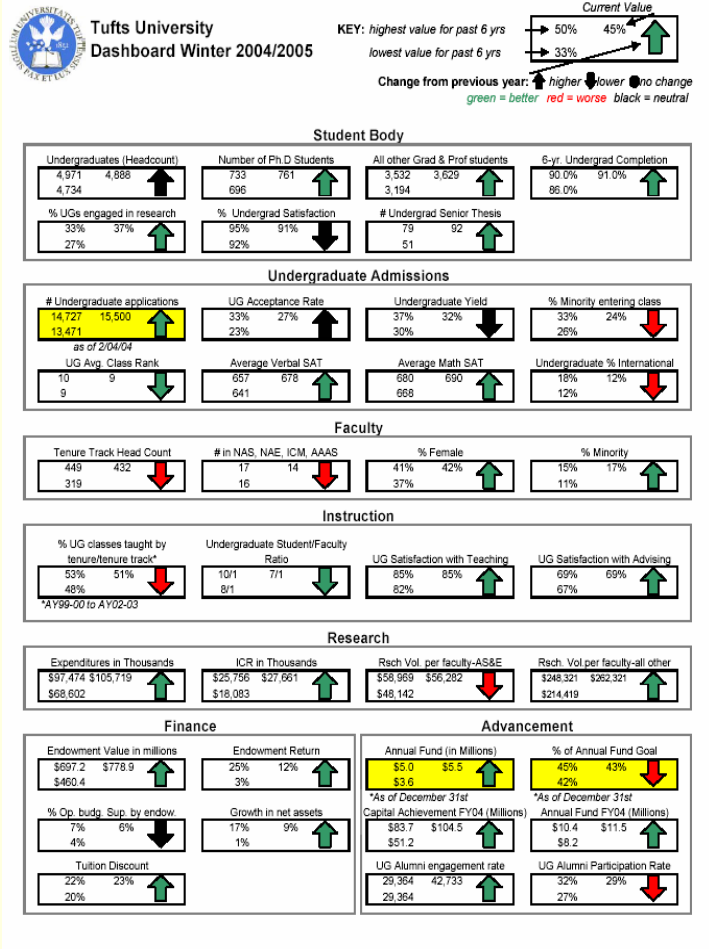
- 21% Peer Assessment Data
  - US News tier
  - US News peer assessment score
  - US News rating

# Visual Presentations Vary

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- Matrices of numbers
- Graphical presentations
- Trend lines
- Peer data
- Incorporation of symbols and/or color

# Tufts





# Dartmouth

Prototype; data are fictitious.

## DARTMOUTH DASHBOARD

### UNDERGRADUATE

#### 1. Apps per Matriculant

10.6 <> 10.4 7.7 9.3

#### 2. Yield

51% <> 51% 46% 51%

#### 3. Average SATs

1450 + 1400 1350 1420

#### 4. Minority Students

30% + 30% 20% 25%

#### 5. International Students

6% - 5% 4% 5%

#### 6. Students with Aid

50% ++ 50% 40% 45%

#### 7. Honors in Major

21% NCD 20% 19%

#### 8. Study Abroad

60% ++ 57% 55% 57%

#### 9. Small Classes

71% -- 67% 57% 63%

#### 10. Large Classes

12% + 9% 9% 10%

#### 11. Student/faculty Ratio

12 <> 9 9 10

#### 12. Tenure-track Instruction

NCD 69%

6 years only.

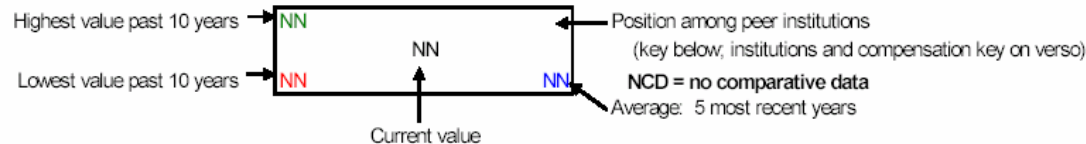
6 years only.

7 years only.

4 years only.

1 year only.

### Key



### Dartmouth's Position (among 17, top-rank is most desirable)

++ among the top 3

<> 8th through 10th

- 11th through 14th

+ 4th through 7th

-- lowest 3

Orange caption indicates a condition of concern

Pink caption indicates major positive trend

# MSU-Bozeman

## Dashboard Indicators, MSU-Bozeman

### Facts & Stats

Annual FTE Enrollment	FY98	FY99	FY00	FY01	FY02	FY03
<b>Resident</b>						
Undergraduate	7,039.07	7,126.60	7,071.27	7,150.97	7,320.97	7,442.67
Graduate	451.04	474.17	555.42	589.05	606.34	641.62
Subtotal	7,490.11	7,600.77	7,626.69	7,740.02	7,927.31	8,084.29
<b>Nonresident</b>						
Undergraduate	2,345.27	2,321.50	2,209.75	2,095.54	1,855.04	1,898.84
Graduate	179.92	198.96	231.21	199.38	202.08	237.76
Subtotal	2,525.19	2,520.46	2,440.96	2,294.92	2,057.12	2,136.60
<b>WUE</b>	194.02	253.19	334.30	376.50	459.50	453.58
<b>Total</b>	10,209.32	10,374.42	10,401.95	10,411.44	10,443.93	10,674.47



# Longwood

## Actual Peer Institutions 1999-2000

Institution:	Academic Reputation	Mid-point SAT	Persist. Rate	Graduation Rate	% Alumni Giving	% E&G to Instruction	Ave. Fac. Salary	Satisfaction Index
Longwood College	2.9	1045	78%	60%	30%	51%	\$47,400	**
Plymouth State College	2.6	960	67%	52%	18%	48%	\$51,900	**
Salisbury State University	2.8	1115	83%	60%	13%	49%	\$47,100	**
Shippensburg University (PA)	2.9	1050	77%	64%	25%	49%	\$63,400	**
Sonoma State University	3.3	1040	76%	48%	6%	51%	\$59,600	**
SUNY Fredonia	2.9	1090	80%	68%	14%	45%	\$49,000	**
SUNY Plattsburg	2.7	1060	78%	61%	19%	51%	\$46,700	**
SUNY Potsdam	2.7	1025	76%	55%	18%	46%	\$44,900	**
UNC - Wilmington	3.2	1080	79%	54%	13%	57%	\$50,700	**
Univ. of Wisconsin: River Falls	2.9 ACT		69%	44%	17%	50%	\$50,000	**
Willamette University	3	1220	89%	74%	33%	33%	\$56,800	**

**Longwood Rank (of 11)**      4      7      5      4      2      2      8      6

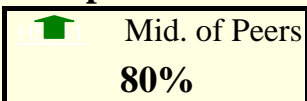
**NOTES:** Academic Reputation, Mid-point SAT, Persistence Rate, Graduation Rate, and Percent Alumni Giving are from the *U.S. News & World Report* Rankings for the Year 2000. (Mid-point SAT is the mid-point of the 25th and 75th percentiles reported in *U.S. News & World Report*. Persistence and Graduation Rates are averages over three years.) Percent E&G to Instruction [(Instruction)/(Total E&G - Research - Scholarships - Mandatory Transfers)] is from the IPEDS Finance Reports for 1995-96 (the most recent available). Average Salary is from the March 1999 issue of *Academe*, the Bulletin of the AAUP (again, the most recent available). Satisfaction Index is from the College Student Experiences Questionnaire. (Individual institution data are not available for the CSEQ; the ranking is based on five actual benchmark institutions and is interpolated to apply to all 11 institutions. Longwood ranks at the 48th percentile. Satisfaction level is not significantly different than the mean of these benchmark institutions.)

# Miami

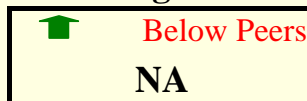
## UM Student Dashboard, 2004

### Admission Indicators

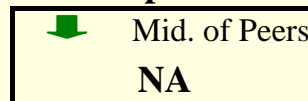
#### Top HS Decile



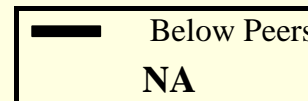
#### Average SAT



#### Accept Rate



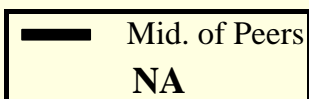
#### Yield Rate



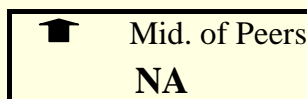
*Data displayed is not actual data.*

### Student Body Indicators

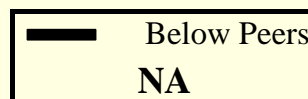
#### NF Enrollment



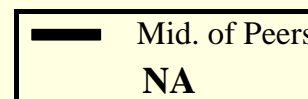
#### UG Enrollment



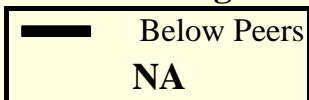
#### Grad. Enrollment



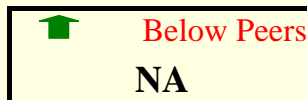
#### Prof. Enrollment



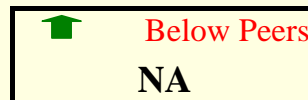
#### Doctoral Degrees



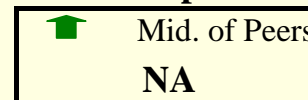
#### NF Retention Rate



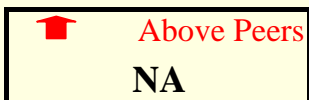
#### Graduation Rate



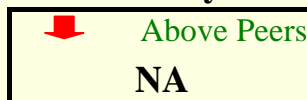
#### % On-campus-DUG



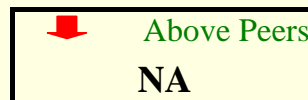
#### % Female-UG



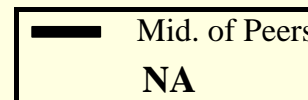
#### % Minority-UG





#### % Int'l-UG



#### % Out-of-State-DUG

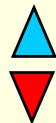


# Juniata

Indicator	Goal	How did JC CHANGE over Last Year?			Peer	How did JC COMPARE in FY 03?		
		Change	Current Year	5-yr High/Low		Peer Worst	JC	Peer Best
Unfunded Tuition Discount	39%		44.6%	44.6% 41.3%	43%		17%	

Color: **Blue** = Improved/Better; **Red** = Worse; **Gray** = Neutral/Average

Symbol:



Higher than last year

Lower than Last year



Unchanged

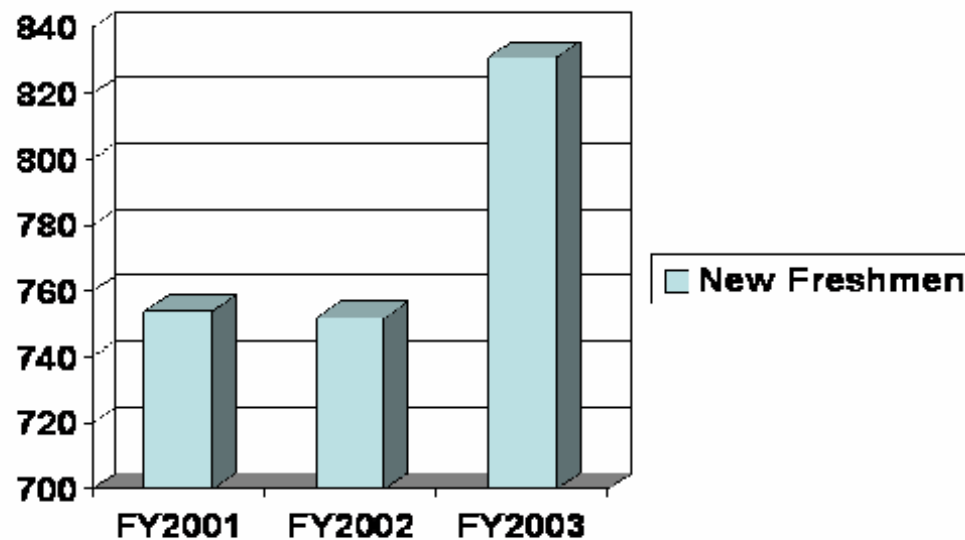
# Fort Hays

## Dashboard Indicators

Any dashboard has information that pertains to either what you need to know or what you want to know about how your institution is running. At FHSU, after careful consideration of what is essential to our effectiveness, we have identified a few "at a glance" measures to help anyone know what is going on at FHSU and how we are doing at it.

### Student Learning Dashboard

1. First-time, full-time freshmen enrolling at FHSU



# Dickinson



## Dickinson College Strategic Plan

*Useful Education*

*Crossing Borders*

*Enterprising Spirit*

*Leadership*

*Innovation*

*Decisiveness*

### Strategic Indicators and Goals for 2010

[Plan Home Page](#)

[Strategic Plan II](#)

[Executive Summary](#)

[Preface](#)

[Mission](#)

[Vision](#)

[Environmental Analysis](#)

[Defining Characteristics  
and Enabling Conditions](#)

[Strategic Indicators](#)

[Strategic Plan I](#)

<b>Admissions</b>	<b>2000</b>	<b>2001</b>	<b>2002</b>	<b>2003</b>	<b>2004</b>	<b>2010 Goal</b>
Total Applicants	3801	3820	4095	4633	4998	<b>6000</b>
Acceptance Rate	64%	64%	51%	52%	49%	<b>40%</b>
Yield	24%	25%	27%	26%	25%	<b>25%</b>
Total Freshmen	594	611	574	624	606	<b>600</b>
Average SAT	1216	1235	1239	1270	1274	<b>1300</b>
Top 10% Class Rank	50%	47%	45%	50%	51%	<b>60%</b>
<b>Student Body</b>	<b>2000</b>	<b>2001</b>	<b>2002</b>	<b>2003</b>	<b>2004</b>	<b>2010 Goal</b>
Total Matriculant Enrollment	2080	2159	2218	2235	2280	<b>2250</b>
% Male	39%	42%	42%	44%	45%	<b>45%</b>
% International	1%	1%	1%	2%	3%	<b>7%</b>
% Minority	5%	6%	7%	8%	11%	<b>18%</b>

# Grand Rapids Community College



## GRCC Dashboard: Learner Success

### Fall to Fall Retention

**Definition:** Improving the retention of students is evidence of our commitment to student success.



### Course Success

**Definition:** Student success in courses is calculated as the percent of students who finish a course with a grade of C or better.



### Workforce Placement Rate

**Definition:** The percent of graduates who find employment or who continue their education at a 4-year college after leaving the community college



## Learner Success: Course Success:

**Definition:** Student success in courses is calculated as the percent of students who finish a course with a grade of C or better. Students who withdraw from the course after the college's official semester count date are considered as failures. The table below shows course success rates for the total group as well as selected student segments. Benchmark comparisons are provided from four Vanguard colleges. Our success rate of 71% for our total group of students is above our target of 70% and above rates for our four benchmark colleges

Course Success Rates (N, grade C or better/N, all grades)	Fall 1999	Fall 2000	Fall 2001	Fall 2002	Fall 2003
Male	67%	67%	68%	67%	68%
Female	72%	72%	72%	72%	74%*
African American	51%	51%	53%	50%	54%
American Indian	55%	61%	57%	52%	59%
Asian	68%	69%	68%	68%	72%*
Hispanic	64%	59%	65%	64%	66%
White	72%	72%	73%	72%	73%*

# Additional Questions

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- Who requested the dashboard?
- Who is the primary audience?
- Who has access to the dashboard?
  - 70% restricted access
- Is the dashboard paper or electronic?
  - Most electronic, some available in print
- Number of dashboards being used at the institution?
  - 75% single dashboard

# Final Thoughts

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- Dashboards are not “just” about the data.
- Dashboards are about presenting data that reflect the state of the institution in a succinct, easily understood, and visually appealing format.
- Dashboards are valuable management information tools.