Young Researchers and the Practice of Institutional Research

LINKING RESEARCH, POLICY AND PRACTICE

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Early Career Higher Education Researchers Network

Timetable

12.45 Introduction: IR in de USA and in Europe
13.00   - Sources of IR
13.30   - Techniques of finding and unpacking
14.00 Break

14.15   -   Relation to senior HE-management
14.40   -   Ways to present information
15.05 Closing remarks
15.15 End

Institutional Research?

Research undertaken within an institution or higher education system to provide information to support an evidence-informed approach to policy and practice.

HEIR Network, 2008

IR:

IR is ... a complex concept

IR is ... needed in HE

IR is ... "Doing Important things for
Important People"

IR is ... an attractive profession

IR is ... what institutional researchers do

SOUTHEASTERN

Southeastern Home > Administration >

Top 10 Reasons Why We Love Institutional Research

1. Just one word....IPEDS
2. Showing the Provost how biology lab rats can be counted in graduation and retention studies
3. Unwavering faith that someday someone will devise a foolproof method for quantifying faculty workload
4. Getting to say things like "Although the state appropriations per FTE have decreased 4% over the last three years, the instructional allocation ratio has risen significantly" in front of the President
5. Explaining CUPA definitions to department heads
6. Thrill of living on the edge when the College of Business makes last-minute data requests
7. Those delightful folks at SPSS Technical Support
8. Playing the IR acronym guessing game: HBCU, CSRDE, CDS, SRTK, SREB, NCES, GRS, SPRE
9. On some reports, I change 6's to 9's and 9's to 6's -- just for fun
10. While completing the staff salary report, momentarily enjoying the look of $500,000 next to my name
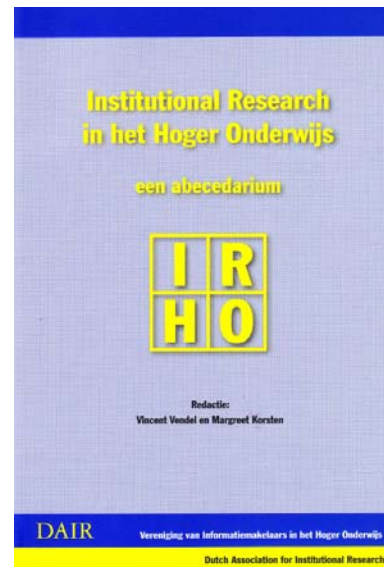
IR in practice:
the USA & Europe

IR: the Dutch development

2000

2011

IR in practice: the Netherlands

▫ Research Universities have a central IR function

▫ Just like many UoAS

▫ Often a one person job: co-ordinating IR activities, because:

▫ IR is undertaken by different functions /roles

Step 1.

Sources of IR
The mountains of administrative data, often
not been used for research. Surveys, already
done

There's gold in them there hills!
Mantz Yorke

Step 2.

Techniques of unpacking these databases.
How to get them, how to use them.

Step 2.

Techniques of unpacking these databases.
How to get them, how to use them.

Step 3.

Relation to senior HE-management, the sense
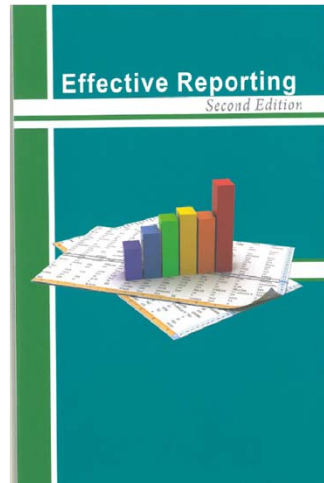of timing to have impact

Step 4.

Ways to present information outside the research arena:
bulletins, fact files illustrated with graphs.
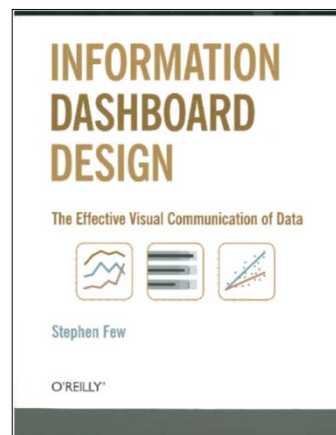
Ways to Present DATA

Dawn Geronimo Terkla
Associate Provost
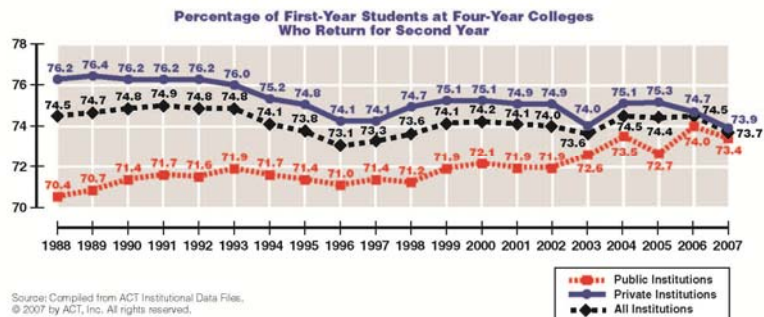September 5, 2012
EAIR

Effective Reporting

Effective Reporting
by Liz Sanders
& Joseph Filkins

Dashboard
by Stephen Few

Lines

Percentage of First-Year Students at Four-Year Colleges
Who Return for Second Year

Source: Compiled from ACT Institutional Data Files.
© 2007 by ACT, Inc. All rights reserved.

Public Institutions
Private Institutions
All Institutions

Student Satisfaction

% Satisfied or Very Satisfied with Social Life on Campus

Seniors
Sophomores
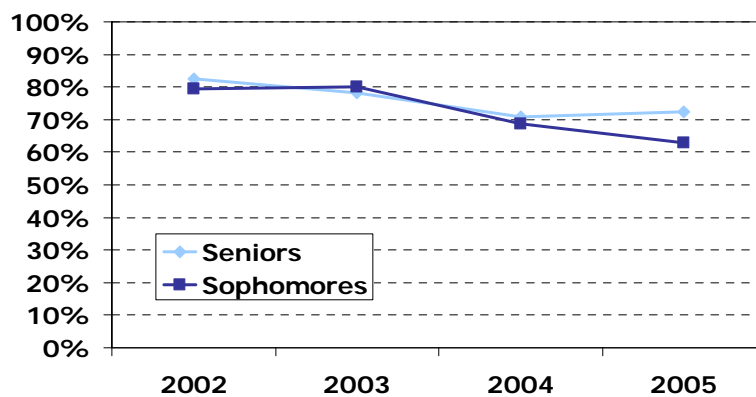
Pie Charts

TUSM Would Benefit from an overall strategic plan to guide it for the next several years.
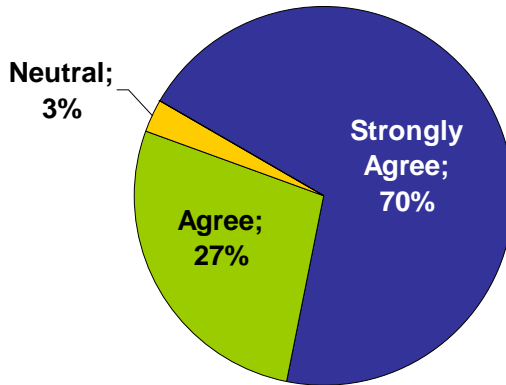
Bar Charts
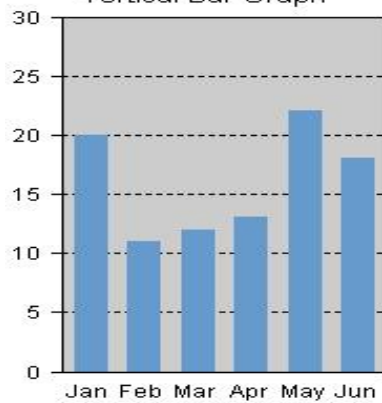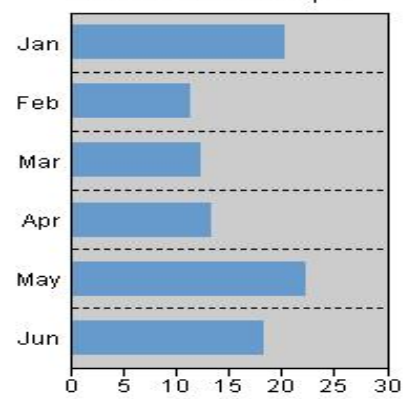
Classic Candlestick
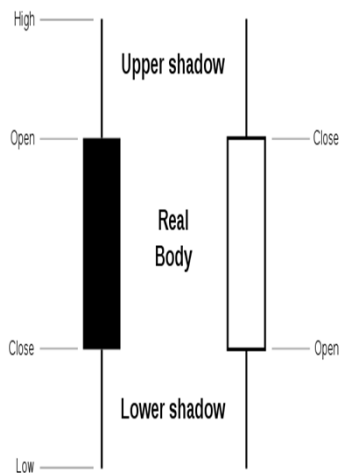
Academic Reputation
Peer Comparison

	2002
Columbia University	4.6
Cornell University	4.6
Duke University	4.6
Johns Hopkins University	4.6
University of Pennsylvania	4.5
Brown University	4.4
Dartmouth College	4.4
Northwestern University	4.4
Washington University in St. Louis	4.1
Georgetown University	4.0
TUFTS UNIVERSITY	3.6
Boston College	3.5
Tufts Rank	11th

Assessment Skills & Competencies

- Most important aspects of formal training:
  - Problem solving & critical thinking
  - Diagnosis & treatment of disease
  - Ability to communicate effectively & empathetically
  - Clinical skills
  - Oral communication skills
  - Patient rapport & handling skills
  - Anesthesiology & pain management

	Employer	Exiting	Alumni
Problem solving and critical thinking	2.74	2.79	2.83
Ability to communicate effectively and empathetically with clients	2.71	2.56	2.57
Diagnosis and treatment of disease	2.71	2.90	2.84
Clinical skills	2.63	2.81	2.78
Oral communication skills	2.63	2.71	2.65
Patient rapport and handling skills	2.55	2.73	2.70
Anesthesiology & pain management	2.50	2.68	2.66

Department Summary

Salary Comparisons

2002	Professor Peers	Professor Tufts	Associate Professor Peers	Associate Professor Tufts	Assistant Professor Peers	Assistant Professor Tufts	Lecturer Peers	Lecturer Tufts
Average	$103,423	$84,509	$69,811	$67,978	$60,997	$58,129	N/A	$47,541
High	$196,277	$88,165	$90,400	$87,145	$81,000	$69,630	N/A	$49,315
Low	$49,000	$76,328	$54,500	$58,706	$33,886	$53,500	N/A	$45,767
Number of Faculty	113	4	46	9	62	5		2
# of Institutions	9		9		8			
2003								
Average	N/A	$86,672	N/A	$75,020	N/A	$60,446	N/A	$50,723
High	N/A	$91,251	N/A	$90,457	N/A	$71,725	N/A	$52,288
Low	N/A	$79,381	N/A	$65,214	N/A	$55,854	N/A	$49,158
Number of Faculty	N/A	3	N/A	9	N/A	9	N/A	2

No peer comparison available for 2003

Average Undergrad Class Size, 1999-2002

101-200	5%
66-100	10%
40-65	9%
22-39	19%
1-21	57%

Undergrad. Enrollment per Class Size Average, 1999-2002

Class Size	FT	FTT	FNTT	PT
1-21	229	22	190	16
22-39	174	34	271	28
40-65	231	43	63	61
66-100	295	183	127	0
101-200	323	159	0	0
200+	0	0	0	0
TOTAL	1253	441	651	105
Average # Faculty	12	4	2	1
Average # Classes	40	6	7	2
Average Enrollment/Course (00-02):				25.9

Grant Expenditures / Faculty, FY02-FY03

# Tenure/Tenure-Track faculty FY02/03	18
Percent Funded FY02	61.1%
Percent Funded FY03	55.6%
Median Grant Expend. (FY02-FY03)	$79,786
Maximum Grant Expend. (FY02-FY03)	$187,149
Minimum Grant Expend. (FY02-FY03)	$177
Total Expend. FY02	$888,381
% ICR FY02	21.7%
Total Expend. FY03	$959,117
% ICR FY03	27.5%

Number of Graduate Students in Department, 2000-2003

	Total	PHD	MS	Average 00-03	
2000-2001	35	27	8	PHD	27
2002-2003	41	28	13	MS	13
2003-2004	44	26	18	Total	40

Number of Graduating Seniors, 99-02

Major	00-01	01-02	02-03	Avg. 99-02
Major 1	10	20	13	14
Major 2	128	103	89	107
Interdisc. Major	3	1	1	2
Total	141	124	103	123

2003 Senior Major's Perceptions of Department*

- Professors really cared about their students — 2.5
- The overall quality of instruction is high — 2.9
- There were many opps. to pursue ind. study — 3.4
- Overall Satisfaction with Major — 3.7

*Scale: 4 = Strongly Agree/Very Satisfied, 1 = Strongly Disagree/Not at all Satisfied

Course Load, 2002-2003

Average Number of Seminars/Lectures Taught 2002-2003				# Students in Independent Study/Research	
FT/FTT	FNTT	PT	Grad	03F	03S
3.3	3.9	2.0	1.4	10	10

Undergrad. Advising Load, 2002-2003

% Advising	Total # Advisees	# Undecided	# Major Advisees	# Other Advisees
96%	Per Faculty Advising (Average)			
	24.84	2.58	19.16	3.11
	Per Department (Total)			
	472	49	364	59
Overall Satisfaction with Major Advisor***				3.63

***5-Point Scale: 5 = Very satisfied, 3 = Neutral, 1 = Very Dissatisfied

[1] Peer comparisons for Faculty Salaries: Boston University, Brown University, Case Western University, Emory University, George Washington University, Massachusetts Institute of Tech, Northeastern University, Stanford University, Vanderbilt University, Worcester Polytechnic Institute
[2] FT = Full-time Tenured; FTT = Full-time Tenure Track; FNTT = Full-time Non-tenure Track; PT = Part-time
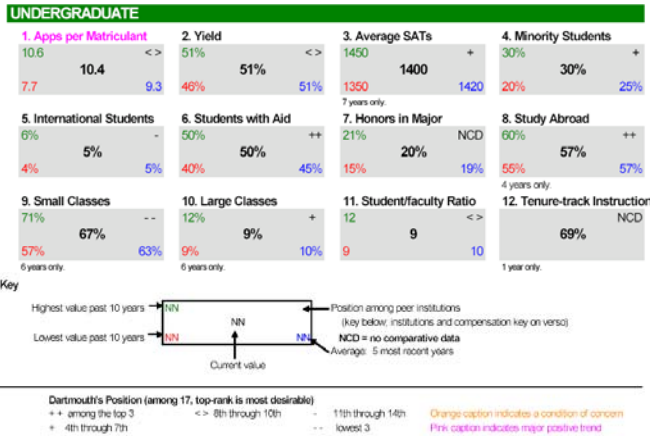
Tufts Dashboard
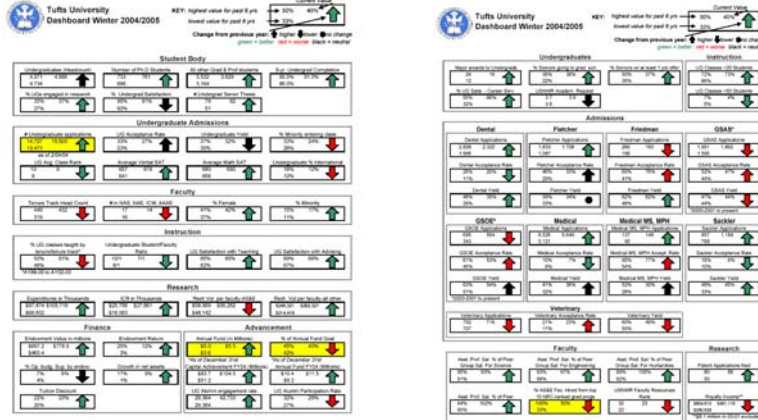
Dartmouth

MSU-Bozeman

Dashboard Indicators, MSU-Bozeman

ⓘ Facts & Stats

Annual FTE Enrollment	FY98	FY99	FY00	FY01	FY02	FY03
Resident						
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
Nonresident						
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
WUE	194.02	253.19	334.30	376.50	459.50	453.58
Total	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.)

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   ⬡ Unchanged

🔻 Lower than Last year

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 car/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
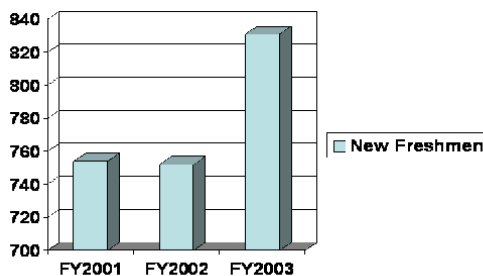
Grand Rapids Community College

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.

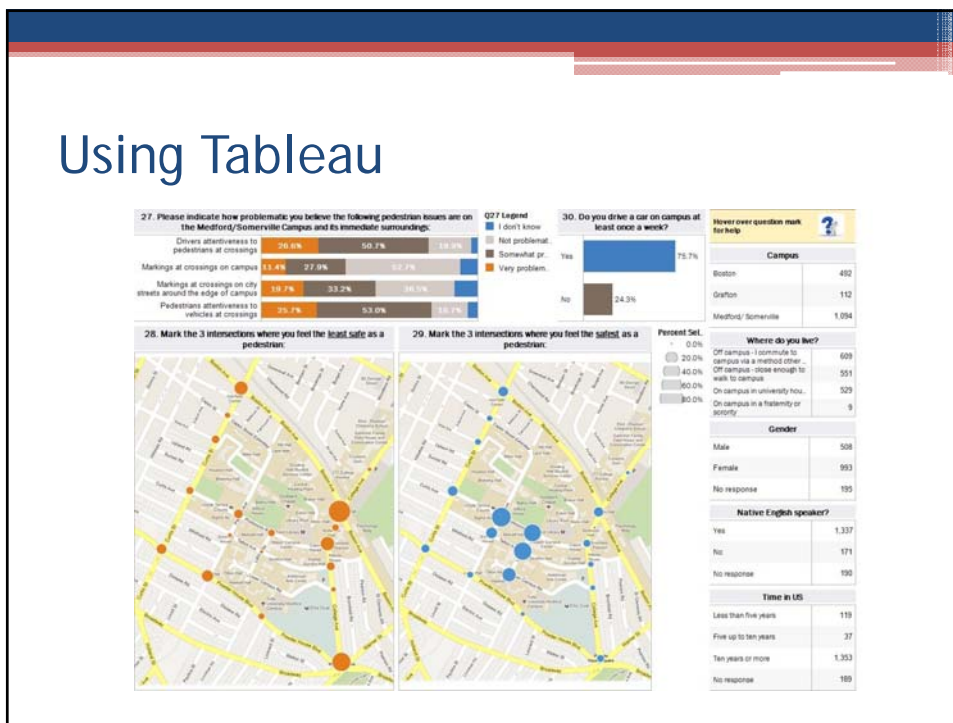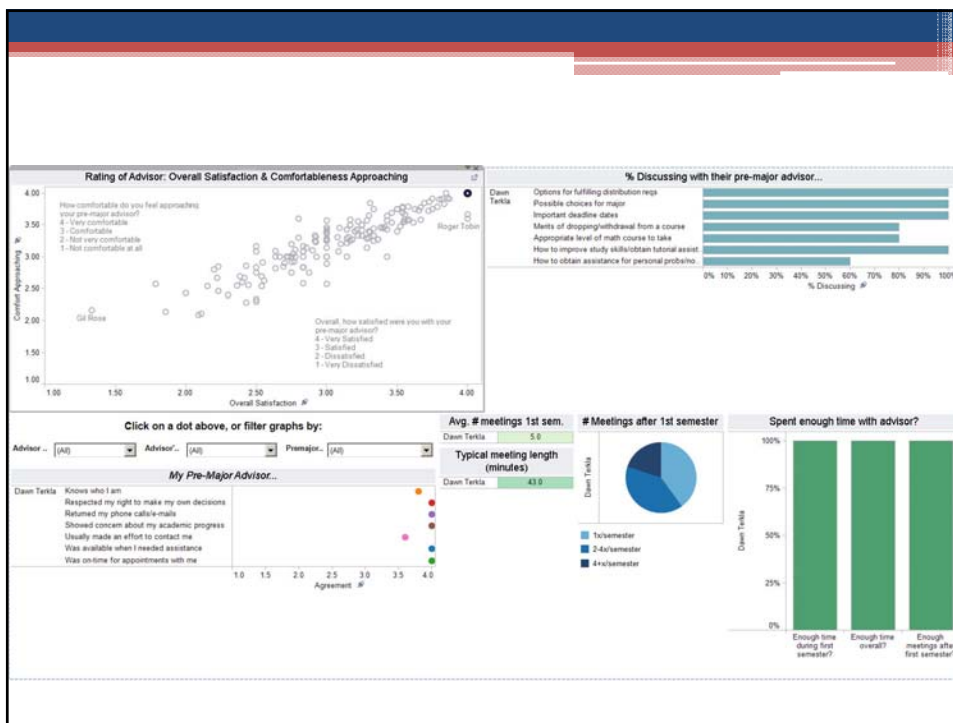| Course Success Rates (N, grade C or better/N, all grades)	Fall 1999	Fall 2000	Fall 2001	Fall 2002	Fall 2003
Male	67%	67%	68%	67%	68%
Female	72%	72%	72%	72%	74%*
African American	51%	51%	53%	50%	54%
American Indian	55%	61%	57%	52%	59%
Asian	68%	69%	68%	68%	72%*
Hispanic	64%	59%	65%	64%	66%
White	72%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

Human Resources Dashboard
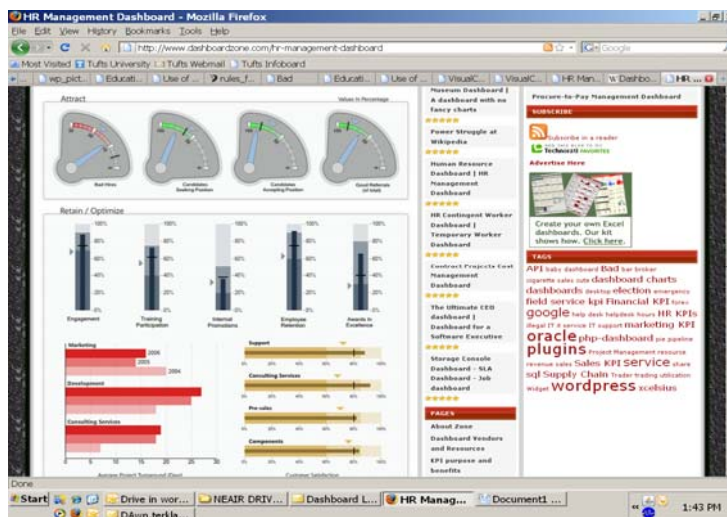
MN State Colleges & Unversities
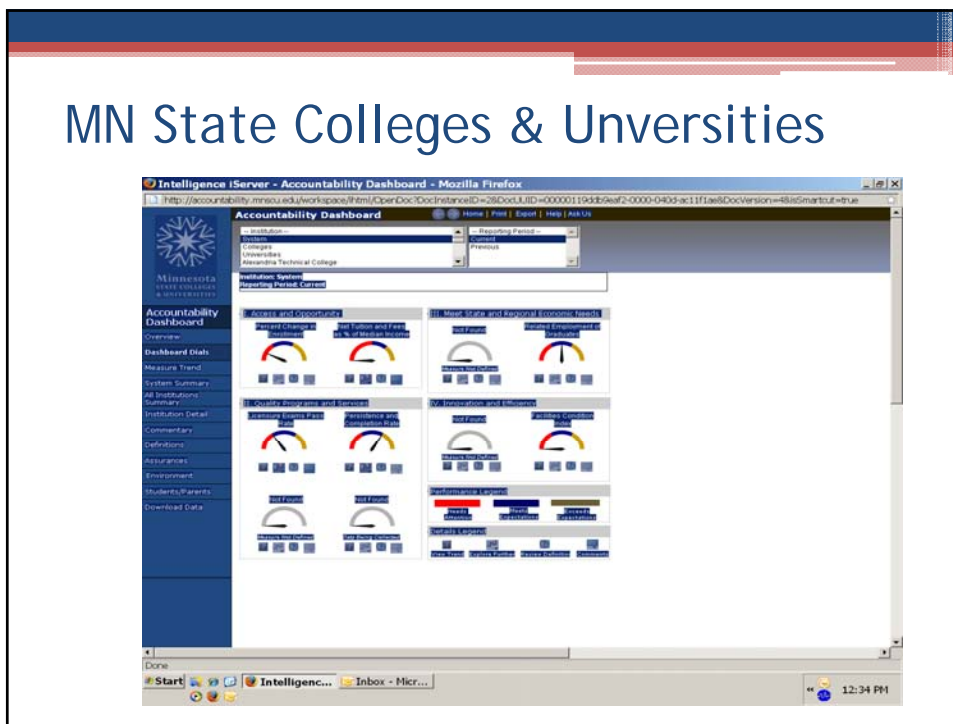
Using Tableau

IR in Amsterdam

IR- products in Amsterdam:

- External & internal reporting
  - Accountability reporting, management reports, F&F, rankings
- Planning & projects
  - Decision support studies, benchmarking, enrolment projections
- Information management
  - Data warehousing: UvAdata
- Research & development
  - Staff Satisfaction Surveys
  - Student Satisfaction and Engagement Surveys

Factsheets, Electronic Factbook,
UvAdata, a datawarehouse.

On line
Enquêtes

Slide 1

UNIVERSITY OF AMSTERDAM

▶ About the UvA

Electronic Factbook

Home
News and Agenda
▶ About the UvA

University profile
Organisation
History
Honorary doctorates
▶ Facts and figures
UvA abroad
Publications
Libraries and museums
Locations
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Education
Research
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Faculties
Facilities
Library
Working at the UvA

search ▶
▶ Search for staff

Key figures | Education and students | Research | Staff | Surveys |
Rankings | Links

Printable version 🖶

■ **Key figures**

The University of Amsterdam has its origins in the Athenaeum Illustre
(1632) and, with more than 30,000 students, almost 5,000 employees
and an annual budget of almost 500 million euros, is one of the largest
general research universities in Europe.

This 'Electronic Fact Book' provides current and detailed facts and figures
about the University.

Study programmes

- 60 Bachelor's programmes (1 taught in English, 2 offer an English
  track)
- 133 Master's programmes
      including 58 taught in English
      including 23 teacher-training programmes
- 9 postgraduate programmes

Students

- Total enrolled in 2009:   30,825
- Number of first-year students 2009/2010:   8,158*

*number of students participating in a study programme for the first time
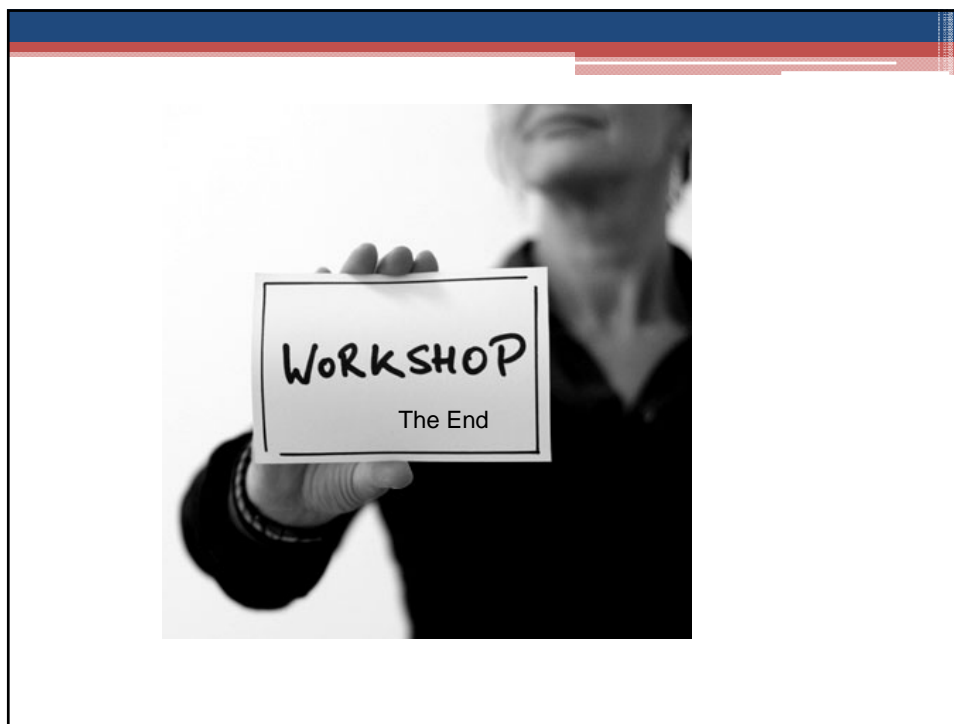at the UvA (bachelor's, pre-masters or master's).*

Research in 2009

- Number of PhDs awarded   381
- Number of scientific publications: 7,855

Staff*

- 2,796 academic members of staff (2,279.0 FTE)
- 2,294 members of staff in non-academic positions (1,783.1 FTE)

43

Slide 2

22

WORKSHOP

The End

IR tips for young researchers :

Get access to
   institutional sources
Understand
   major issues, uncertainties
Know about
   planning, management, administrations
Identify
   decision cycles
Get access to
   decision makers
Understand
   teaching and learning

I Think
and
Therefore
I R

**Young Researchers and
the Practice of Institutional Research**

LINKING RESEARCH,
POLICY AND PRACTICE

Rachel Sweetman & Christian Schneijderberg
Early Career Higher Education Researchers

Dawn Geronimo Terkla, Tufts University, USA
Peter Hoekstra, University of Amsterdam, the Netherlands

Thank you