Using Data to Inform, Persuade, and Make Decisions

March 9, 2016

Division of Management Information (DMI) Staff

Amy Edwards aledward@illinois.edu
Shinta Hadi skhadi@illinois.edu
Chris Lehman calehman@illinois.edu
Ting Lu tingleu@illinois.edu
Jill Maxey jmaxey@illinois.edu
Renee Nagy rnagy@illinois.edu
Mary Sappenfield msappen@illinois.edu
Elizabeth Stern estern@illinois.edu

Phone: 333-3551 E-mail: dmi@illinois.edu
Fax: 333-2863 Address: 100 Swanlund Administration Building, MC 304

Why be data-savvy?

• To better manage your unit
• To know what others know about you
• To respond to inquiries
• To avoid reinventing the wheel
Our Goals for Today

• Learn about the data on the Management Information web site & other sites
• Understand the value of the data for the management of your unit
• Retrieve the data and move it into Excel for further analysis

Set a bookmark today:

http://www.dmi.illinois.edu

Departments and Executive Officers

• Department addresses & phone numbers
• Executive officers
• Staff directories
• Department URLs
• Department codes (old and new)
Departments and Executive Officers

Example/Demo 1
- Find your own unit
- Click on the “Staff” link
- Move the staff directory for your department into Excel

Student Enrollment Reports

“Official 10-day” enrollments
- Final Statistical Abstract: campus totals, use for general information about campus.
- Enrollments by college, dept, program: degree, major, concentration, class, gender, race, citizenship, residency

Student Enrollment Reports

Typical uses
Trends in time by program
- Survey responses
- Grant proposals:
  - institutional characteristics
Course Information System

• All courses, sections, instructors, IUs since 1987
• Course history is tracked despite changes in rubric or number.
• Helpful FAQ explaining course processing & accounting.
• Many ways of viewing the data

Course Information System

Example/Demo 2

Summarize IUs generated by each faculty member paid by your unit for last year using an Excel Pivot table

Course Information System

Faculty Teaching History
• For P&T documentation
• For annual evaluations
Course Information System

Example/Demo 3

Find all courses taught since 1987 by one faculty member.

Look at the P&T format and the table format.

Course Information System

Example/Demo 4

Get a summary of all offerings of NRES 293 (or other course) since 1987.

Course Information System

Example/Demo 5: Six‐Ten Report

• Courses not offered in the past three years (fall, spring, summer terms, on‐ and off‐campus)
• Courses failing to “make” in the average of the last two offerings:
  – 10 students for 100‐400 level
  – 6 students for 500, 600, 700 level
Course/section Anomaly Report

Normal: instructor is paid on state funds from the unit offering the course.

Anomaly: anything else!
Anomaly reports are available in Course Information System, you will be asked to look at them twice during the year.

Two Course Accounting Systems

1. Credit for offering a course
   • Determined by controlling dept
   • Crosslisted Courses
     — controlling dept gets credit
   • Used for external reporting
   • Internal reporting:
     — class size, who is teaching....

Two Course Accounting Systems

2. Credit for paying for a course
   • Determined by dept paying instructor
   • Must be a dept paying the instructor
     — If courtesy - no pay - we use the offering dept
   • Used for internal reporting
     — budget allocation, $ per IU, IU per FTE
Campus Profile
Ten years of data summarized by department, college, and campus:
- Budgets & expenditures
- FTE and headcount staff
- Student enrollment, qualifications, retention, graduation rates
- Course enrollments & IUs
- much, much more!

Campus Profile – general notes
- Each page can be downloaded to Excel with a simple button
- Choose years going up or down
- Print option available on each page

Campus Profile
Types of Reports Available
Standard Profile
- One unit per page
- Most commonly used items
Campus Profile
Types of Reports Available

Strategic Profile
• One unit per page
• Two sets of Metrics
  – Campus-wide & College-specific
• Three kinds of Charts
  – Strategic Dashboard, College Dashboard and Custom Charts

Custom Reports
You select Units and Items

Example/Demo 6
• Retrieve a standard Campus Profile for the campus.
• Retrieve a Strategic Profile for the College of ACES (or your choice of college)
• Look at the Dashboards and Custom Charts for the Strategic Profile
Campus Profile
Example/Demo 7

Create a custom report of all items for the College of ACES to view in your browser.

Look at all the drilldowns!

Campus Profile
Example/Demo 8

Graph the terms-to-degree for bachelors, masters, and doctoral students (lines 4720-60)

Proposal Data System

All proposals submitted from FY96
- By Department
- By Agency/Sponsor
- By Investigator

Report may be summarized by department or by agency.
Proposal Data System

Example/Demo 9

You are negotiating with the Grainger Foundation for a grant.

Is it likely you will get any Indirect Dollars?

Proposal Data System

Example/Demo 10

Find all grant proposals written by a faculty member in your department.

Tuition, Waiver, Appointments

What tuition is being charged to your students and what kind of waivers do they have?

How much will you need to pay another department for the tuition for the graduate assistant you’ve hired?
Activity Reporting System

- Mandated by Federal and State reporting requirements
- Activities and cost sharing percents entered by your staff
- Useful data: current & obligated pay; appts and teaching assignments; salary & appt history to 1988
- Authorized users can change the paying dept for an instructor's course

Peer salary study

Compares your faculty salaries with selected peer departments at other institutions.

Faculty Salary Equity Study

Faculty salaries as a function of:
- discipline
- rank
- years from degree
- first rank at UIUC
- time to tenure
- gender
- race
- administrative post

Which factors contribute significantly?
Faculty Salary Equity Study

Two issues:
1. Campus-wide, do gender and race affect salary significantly?
2. What salary is predicted for each individual and how does it compare to the actual salary?

Databases outside of DMI

Academic Analytics:
- Faculty scholarly productivity database
- Summary data & graphics for each department and doctoral program in U.S.
  - Books
  - Citations
  - Journal Articles
  - Grants
  - Awards

Databases outside of DMI

Decision Support data warehouse
- Standard reports: Eddie
- Business Objects: drag & drop create reports

Planning & Budgeting
- IPEDS: enrollments, degrees, faculty
- Campus databook: Retention, new student characteristics
- Underrepresented report – minorities & disabled students