Dynamic Academic Profiles

Using Established Databases
in Pursuit of Strategic Planning

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University of Nevada, Las Vegas
Office of Institutional Analysis & Planning
October 19, 2006
We like databases…
...in Pursuit of Strategic Planning

- Established Databases
  - Faculty Workload
  - Student Information System
- Online Academic Profiles Application
“Making data more accessible also serves to improve data quality over time. As people use the data, errors can be corrected as they are found.”

- Scott Thorne, MIT
Fall 2002 – Faculty Workload

- Online application for departmental data entry of course assignments and reassignments

- Online reporting tools for Provost, Deans, Department Chairs to provide oversight
Instructional Assignments for TST 101 001
Introduction to Bug Finding

Currently Assigned Instructors:

<table>
<thead>
<tr>
<th>Instructor</th>
<th>Dept</th>
<th>Method</th>
<th>Enrollment</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Corea, Chick</td>
<td>TST</td>
<td>LLB</td>
<td>30</td>
<td>1.5</td>
</tr>
<tr>
<td>Ellington, Duke</td>
<td>TST</td>
<td>LLB</td>
<td>30</td>
<td>1.5</td>
</tr>
</tbody>
</table>

Assign an Instructor:

Filter: Computer Testing  by Last Name
Instructor: --Select Instructor--
Method: Lecture/Lab Combination
Enrollment: 30  Credits: 1.5

Save Changes and Next  Save Changes and Return  Cancel
### Department Summary for Computer Testing

**PERM**

<table>
<thead>
<tr>
<th>Instructor Name</th>
<th>Rank</th>
<th>Lect/Lab Creds</th>
<th>Lect/Lab Enrl</th>
<th>Total Creds</th>
<th>Total Enrl</th>
<th>Reassign Creds</th>
<th>Total + Reassign Creds</th>
<th>UG SCH</th>
<th>Grad SCH</th>
<th>Total SCH</th>
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<tbody>
<tr>
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<td>Fitzgerald, Ella</td>
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<td>6</td>
<td>1</td>
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<td>6</td>
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</table>

**Totals:**

- Lect/Lab Creds: 3
- Lect/Lab Enrl: 30.0
- Total Creds: 12.0
- Total Enrl: 45.0
- Reassign Creds: 0
- Total + Reassign Creds: 12.0
- UG SCH: 138.0
- Grad SCH: 0.0
- Total SCH: 138.0

**Averages:**

- Lect/Lab Creds: 1.0
- Lect/Lab Enrl: 10.0
- Total Creds: 4.0
- Total Enrl: 15.0
- Reassign Creds: 0
- Total + Reassign Creds: 4.0
- UG SCH: 46.0
- Grad SCH: 0.0
- Total SCH: 46.0

**TEMP**

<table>
<thead>
<tr>
<th>Instructor Name</th>
<th>Rank</th>
<th>Lect/Lab Creds</th>
<th>Lect/Lab Enrl</th>
<th>Total Creds</th>
<th>Total Enrl</th>
<th>Reassign Creds</th>
<th>Total + Reassign Creds</th>
<th>UG SCH</th>
<th>Grad SCH</th>
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</table>

**Totals:**

- Lect/Lab Creds: 0.0
- Lect/Lab Enrl: 0.0
- Total Creds: 3.0
- Total Enrl: 29.0
- Reassign Creds: 0
- Total + Reassign Creds: 3.0
- UG SCH: 87.0
- Grad SCH: 0.0
- Total SCH: 87.0

**Averages:**

- Lect/Lab Creds: 0.0
- Lect/Lab Enrl: 0.0
- Total Creds: 3.0
- Total Enrl: 29.0
- Reassign Creds: 0
- Total + Reassign Creds: 3.0
- UG SCH: 87.0
- Grad SCH: 0.0
- Total SCH: 87.0
Faculty Workload - Data

- Operational database for departmental data entry
- Data collection occurs annually in the Fall term
Fall 2003 – DataNet

- Online application for reporting student and enrollment information
  - Headcount / FTE Trends
  - Course Enrollment Trends
  - Degrees Conferred
- Flexible, with depth
Headcount Trends

Terms: Recent Fall Terms
Cohort: All Students
Measure: Student Headcount

Group By:
- Department
- Gender

Additional Criteria (optional)

<table>
<thead>
<tr>
<th>Field</th>
<th>Value</th>
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<tbody>
<tr>
<td>College</td>
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Include Totals

Display Report
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<tr>
<th></th>
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<td>212</td>
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<td>157</td>
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</table>

**Parameters**

AdditionalCriteria: College=Engineering
DataNet - Data

- Warehoused data from our Student Information System
- Data extracts taken at official points in time for start and end of terms
Over time…

- Usable warehouse of Faculty activity data
- Usable warehouse of Student and Enrollment data
Our reward…

- Build more applications!
Seriously, though…

- Our access to the data is better
- Our understanding of the data is better
- Our techniques for reporting the data have improved
- More opportunities to give it back to *them* in meaningful ways
And this means…

- *Their* access to the data is better
- *Their* understanding of the data is better
- *Their* decisions based on the data are better
And this means…

- “Making data more accessible also serves to improve data quality over time. As people use the data, errors can be corrected as they are found.”

- Scott Thorne, MIT
And this means…

- The quality of the institution’s data improves over time
- Academic officials can see the connection between their operational processes and higher analytical functions
Academic Profiles

- Consolidates enrollment & faculty data, presented in higher level reports
- Breadth, not depth
- Easy, intuitive, understandable
Academic Profiles

- Provide meaningful information to support strategic planning for deans and departments, but…

- …keep the application manageable for us!
Dynamic Academic Profiles

- Reports are dynamically generated on the web, with live queries to the respective databases
- Simple updates in conjunction with our existing warehousing processes
- Do the hard work just once
WE HAD TO CUT SOME CORNERS TO GET THE DEMO READY THIS SOON.

WALLY IS UNDER THE TABLE. HE’LL PRETEND TO BE THE 3-D INTERFACE THAT WE COULD BUILD IF WE WEREN’T DOING USELESS DEMOS.

HE’S A LITTLE FUZZY. CAN YOU ADJUST IT?

TRY THE ELECTRIC SHAVER.
Additional Considerations

- *Dynamic* requires consistent data structure and access each term
- User authentication
- Addressing organizational changes
Dynamic Academic Profiles

Props to my partners in crime:
Kari Coburn, Diane Muntal, Christina Drum,
Lynne Personius, Mary Williams

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