We have goals...now what?

Using Data to Achieve Equity in Educational Outcomes

SHEEO/NCES Network Conference & IPEDS Workshop
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Converging Pressures

• Economic competitiveness → focus on student success and higher levels of attainment
• Severe fiscal constraints → crisis tends to trump other finer-grained policy considerations
• Rapid demographic shifts → growth among students we’ve traditionally struggled to serve well
Governors’ FY12 Budget Proposals vs. FY08 Budgets

Source: Center on Budget and Policy Priorities, March 2011.
Undergraduate Credentials and Degrees Awarded per 1,000 18 to 44 Year Olds with No College Degree by Race/Ethnicity – WICHE States (2005)

Certificates
- White non-Hispanic: 13.9
- Black non-Hispanic: 17.5
- Hispanic: 6.8
- Hispanic: 15.7
- Hispanic: 15.7
- American Indian/Alaska Native: 24.1
- Asian/Pacific Islander: 21.5

Associate's
- White non-Hispanic: 24.1
- Black non-Hispanic: 21.5
- Hispanic: 9.3
- Hispanic: 23.0
- Hispanic: 29.9

Bachelor's
- White non-Hispanic: 43.1
- Black non-Hispanic: 24.0
- Hispanic: 9.9
- Hispanic: 20.3
- Asian/Pacific Islander: 66.4

Source: NCHEMS (from NCES IPEDS, U.S. Census Bureau)
Educational Attainment of Whites and Minorities (Blacks, Hispanics, Native Americans) Aged 25 to 44

Source: U.S. Census Bureau, 2009 ACS PUMS (via NCHEMS)
Different data for different purposes
If I’d known they wanted me to use all this info— I would never have asked for it!
Data for Organizational Change

Beyond IPEDS...

- What data are produced routinely in your system or campus?
- For whom?
- Is Institutional Research seen as a passive producer of data or an agent of institutional learning?
### Table 1.1: Student Progress and Achievement Rate

Percentage of first-time students who showed intent to complete and who achieved any of the following outcomes within six years: Transferred to a four-year college; or earned an AA/AS; or earned a Certificate (18 units or more); or achieved "Transfer Directed" status; or achieved "Transfer Prepared" status. (See explanation in Appendix B.)

<table>
<thead>
<tr>
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</tr>
</thead>
<tbody>
<tr>
<td>Student Progress and Achievement Rate</td>
<td>52.7%</td>
<td>53.1%</td>
<td>56.9%</td>
</tr>
</tbody>
</table>

### Table 1.1a: Percent of Students Who Earned at Least 30 Units

Percentage of first-time students who showed intent to complete and who earned at least 30 units while in the California Community College System. (See explanation in Appendix B.)

<table>
<thead>
<tr>
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</thead>
<tbody>
<tr>
<td>Percent of Students Who Earned at Least 30 Units</td>
<td>71.1%</td>
<td>72.3%</td>
<td>74.2%</td>
</tr>
</tbody>
</table>
Benchmarking Equity and Student Success Tool (BESST)

Nevada System of Higher Education

Baseline Data: Current rates of progress for full-time students who enrolled at NSHE 4-year institutions.

Starting Cohort

End

Milestones

Rates

1534
35.9%

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Data for Organizational Change
CUE/WICHE Partnership with the Nevada System of Higher Education

Building capacity to use data proactively:

- Making data accessible and meaningful
- Asking the right questions of the data
- Structuring data intentionally to promote equity
- Setting goals and developing strategies
Making data accessible and meaningful

- Follow cohorts longitudinally through critical pathways, for example:
  
  - How many students enter and complete developmental sequences?
  
  - How many students accumulate enough credit hours each semester to be on-track for timely degree/certificate completion?
  
  - How many students in STEM fields succeed in critical milestones like gateway math or science courses?
## NSHE Two-Year Inquiry

Following students who began at a NSHE two-year institution during the Fall of 2004 or Spring 2005:

<table>
<thead>
<tr>
<th>COHORT</th>
<th>MILESTONE 1</th>
<th>MILESTONE 2</th>
<th>MILESTONE 3</th>
<th>OUTCOME</th>
</tr>
</thead>
<tbody>
<tr>
<td>Two-Year “degree seeking” students</td>
<td>Earn 12 Credits within 1 year</td>
<td>Earn 24 Credits within 1 year</td>
<td>Earn 60 Credits within 3 years</td>
<td>Degree, certificate, transfer, or still enrolled</td>
</tr>
</tbody>
</table>
NSHE Four-Year Inquiry

Following students who began at a NSHE four-year institution during the Fall 2004 or Spring 2005.

<table>
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<tr>
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<th>MILESTONE 2</th>
<th>MILESTONE 3</th>
<th>MILESTONE 4</th>
<th>MILESTONE 5</th>
<th>OUTCOME</th>
</tr>
</thead>
<tbody>
<tr>
<td>Four-Year “degree seeking” students</td>
<td>Earn 12 Credits within 1 year</td>
<td>Earn 24 Credits within 1 year</td>
<td>Earn 60 Credits within 5 years</td>
<td>Earned 75 Credits within 5 years</td>
<td>Earned 90 Credits within 5 years</td>
<td>Bachelor’s degree or still enrolled</td>
</tr>
</tbody>
</table>
NSHE Nursing Inquiry

Following students who declared Nursing majors at NSHE institutions.

<table>
<thead>
<tr>
<th>COHORT</th>
<th>MILESTONE 1</th>
<th>MILESTONE 2</th>
<th>MILESTONE 3</th>
<th>MILESTONE 4</th>
<th>OUTCOME</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nursing majors in 2-year or 4-year programs.</td>
<td>Enrolled in gateway Math</td>
<td>Enrolled in Intro Biology</td>
<td>Enrolled in Microbiology</td>
<td>Enrolled in Core Nursing Req’d Course</td>
<td>Associate’s or Bachelor’s in Nursing or Still Enrolled</td>
</tr>
</tbody>
</table>
Lessons Learned

- Disaggregation of unit-record data reveals a treasure trove of information about where to intervene to improve outcomes.
- It does not tell you *how* to intervene; that requires an inclusive, engaged, and iterative process.
- Lack of availability of or uniformity in data fields presents challenges for analysis (i.e., “transfer”)
- Unit-record analysis is extraordinarily time-consuming; care in documentation is vital, especially when results challenge conventional wisdom