1. Accountability
2. Capacity Building
3. Performance-based Funding
4. What kinds of cross-institutional alliances are important
Big Data

• Big Data has captured public attention as a critical tool to advance data analytics, visualization and customized services to consumers.
• This trend is affecting higher education with more data available on student readiness, progression and success.
• While much is known about what works to improve student persistence, completion, and interventions that increase the likelihood of success, it takes local will to make sense of and act on this information.
• Academic analytics advances on campus require the collaboration of multiple offices that share in data collection, analysis, and governance.
Only 8 percent of CAOs strongly agree their faculty understand the financial challenges confronting their institutions.

Most are optimistic about the potential for adaptive testing and learning.

Only 2 in 10 CAOs across sectors say their Institution is very effective in the area of identifying and assessing student outcomes.

A majority of chief academic officers say they will increase emphasis on cutting underperforming academic programs and collaborating with other institutions.

Few agree that MOOCs have great potential to make positive impact on higher education.

One in four CAOs are confident in their institution’s effectiveness at using data to aid and inform campus decisions.

Inside Higher Education 2013 Survey of College and University Chief Academic Officers
Key Performance Measures: Using Analytics to Improving Student Success
First Predictive Analytics Project for the System: Student Success

Student Specific Knowledge that Guides Interventions to Improve Success

Analysis to Identify Predictors of Retention, Graduation & Transfer

- Link student data from all internal and external sources
- Segment students into based on similarities in pattern and extent of success
  - Determine significant predictors and relative impact for each segment
- Identify student categories with the highest potential to improve success
  - Target student specific interventions
  - Monitor impact on success

Current Characteristic Data
- Demographic characteristics
- High school information
- PSEO participation
- Major/Program
- Financial aid by type
- Family/student information (FAFSA)

Current Academic Data
- GPA
- Course taking patterns
- Course success
- D2L data
- Transfer courses

Current Assessment Data
- ACT/SAT scores
- Accuplacer scores
- Placement levels

Current External Data
- Employment and earnings from UI data
- Enrollment outside the system
- Graduation outside the system

Potential New Data Sources
- HS course-taking
- K-12 assessments
- PLTW/Get Ready participation
- Use of support services
- Participation & extent of interventions
- Student activity/participation

Ewell: Performance Measures

• Performance measures are powerful tools, so use them wisely
• Don’t focus too much on moving the numbers instead of addressing the cause
• Poor performers are often those who need additional resources
• Don’t hold people responsible for things they can’t control
Dashboards and Reporting

• Present focused and easily understandable information
• Direct decision-makers’ attention to key issues
• Provide multiple levels of information with drill-down or cascading to more granular levels
• Display trends over time
• Provide visual and tabular displays that permit multi-faceted analysis
• Provide comparisons from internal or external sources
• Assign a value judgment to performance
Board of Trustee’s Accountability Framework and Dashboard

• Development process
• Purpose and audience
• Content
• Performance categories
• Features and functions
• Public launch
Performance Categories

• Use statistics when possible to:
  – Identify significant differences
  – Ignore random variation
Persistence and Completion Rate
Desired Direction: Up

Fall Entering Year (measured at second fall)

<table>
<thead>
<tr>
<th>Year</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>2001</td>
<td>81.1%</td>
</tr>
<tr>
<td>2002</td>
<td>79.9%</td>
</tr>
<tr>
<td>2003</td>
<td>78.0%</td>
</tr>
<tr>
<td>2004</td>
<td>77.9%</td>
</tr>
<tr>
<td>2005</td>
<td>82.2%</td>
</tr>
<tr>
<td>2006</td>
<td>82.9%</td>
</tr>
</tbody>
</table>

Retained, Transfer, Graduated Students in Cohort:
- 2001: 400
- 2002: 473
- 2003: 425
- 2004: 419
- 2005: 475
- 2006: 488
### Number of Institutions in Each Performance Category

#### I. Access and Opportunity
- **Percent Change in Enrollment**: 37, 7
- **Tuition and Fees**: 31

#### II. Quality Programs and Services
- **Licensure Exams Pass Rate**: 28, 5
- **Persistence and Completion Rate**: 37

#### III. Meet State and Regional Economic Needs
- **Partnerships**: Measure Not Defined
- **Related Employment of Graduates**: 23, 5

#### IV. Innovation and Efficiency
- **Innovation**: Measure Not Defined
- **Facilities Condition Index**: 18, 10

#### High Quality Learning
- **Measure Not Defined**

#### Student Engagement
- **Data Being Collected**

**Performance Legend**
- Needs Attention
- Meets Expectations
- Exceeds Expectations

**Details Legend**
- Explore Further
- Review Definitions
- Comments
Performance Thresholds

• Board or Chancellor goal or target
  – Board: Facilities condition index will improve

• External reference standard
  – Licensure exam pass rates should approach state average

• Expected value
  – Regression model predicts related employment rate based on program mix

• Historical performance
  – Persistence rate should stay within historical range