Excellence  12/14/2011

Joe Thiel, Bern Kohler, Tamara Miler, John Neumeier, David Singel

Specific Charge: Provide measurable goals for excellence

Initial Question: What do we mean by excellence?
Is this the very best, is it a cliché? Would “quality” better? Would it be sufficiently aspirational; would it be a grand enough adjective.

Provisional Solution: While aspiring to “best”, we can inform our priorities, our progress, and our competitive niches with “better”. How do we compare with our self-image, with our past, and with our competitors? Metrics facilitate comparative ranking.

Second Question: What are the metrics?

Provisional Solution: Consider standard metrics as a point of departure; then ask: what are we missing?

In particular, if our overarching goal is the integration of learning, discovery, and engagement, what new metrics do we need to add? Moreover if this perspective is ultimately to inform our planning and budgeting, what do we need to emphasize?
**Standard Metrics:** No shortage of rankings and arguments about them

http://en.wikipedia.org/wiki/College_and_university_rankings

- **1 Global rankings**
  - 1.1 Academic Ranking of World Universities
  - 1.2 G-factor
  - 1.3 Global University Ranking
  - 1.4 HEEACT—Ranking of Scientific Papers
  - 1.5 High Impact Universities: Research Performance Index
  - 1.6 Human Resources & Labor Review
  - 1.7 Leiden Rankings
  - 1.8 Newsweek
  - 1.9 Professional Ranking of World Universities
  - 1.10 QS World University Rankings
  - 1.11 SCImago Institutions Rankings
  - 1.12 Times Higher Education World University Rankings
    - 1.12.1 Times Higher Education World Reputation Rankings
  - 1.13 U-Multirank
  - 1.14 University Ranking By Academic Performance
  - 1.15 Webometrics
  - 1.16 Wuhan University

- **2.3.3 United States**
  - 2.3.1 U.S. News & World Report College and University rankings
  - 2.3.2 United States National Research Council Rankings
  - 2.3.3 Faculty Scholarly Productivity rankings
  - 2.3.4 The Top American Research Universities
  - 2.3.5 Washington Monthly College rankings
  - 2.3.6 TrendTopper MediaBuzz College Guide
  - 2.3.7 Forbes College rankings
  - 2.3.8 American Council of Trustees and Alumni
  - 2.3.9 Revealed preference rankings
  - 2.3.10 Other rankings of US universities

Apart from the beauty pageants, there measures are, more or less the same, and TARU is a reasonable place for MSU, as a Carnegie VHR institution to start.
The Center for Measuring University Performance determines the Top American Research Universities by their rank on nine different measures: Total Research, Federal Research, Endowment Assets, Annual Giving, National Academy Members, Faculty Awards, Doctorates Granted, Postdoctoral Appointees, and SAT/ACT.

### TARU (Top American Research Universities) 2008

<table>
<thead>
<tr>
<th>Category</th>
<th>Value for # 100</th>
<th>Value for # 100, publics</th>
<th>MSU rank</th>
<th>MSU rank, publics</th>
<th>to reach top public</th>
<th>to reach top</th>
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<tr>
<td>Total Research</td>
<td>158</td>
<td>89</td>
<td>117</td>
<td>115</td>
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<td>49</td>
<td>78</td>
<td>126</td>
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<td>Endowment</td>
<td>679</td>
<td>???</td>
<td>107</td>
<td>370</td>
<td>138</td>
<td>need 2-3x</td>
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<tr>
<td>Annual Giving</td>
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<td>26</td>
<td>9</td>
<td>415</td>
<td>187</td>
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<td>1</td>
<td>0</td>
<td>211</td>
<td>133</td>
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<tr>
<td>Faculty Awards</td>
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<td>3</td>
<td>2</td>
<td>189</td>
<td>132</td>
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<td>Doctorates/yr</td>
<td><strong>185</strong></td>
<td><strong>105</strong></td>
<td><strong>52</strong></td>
<td><strong>238</strong></td>
<td><strong>153</strong></td>
<td>need 2x</td>
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<tr>
<td>Postdoctorals</td>
<td>127</td>
<td>54</td>
<td>82</td>
<td>126</td>
<td>84</td>
<td>√</td>
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<tr>
<td>SAT/ACT</td>
<td>580-719</td>
<td>21-27</td>
<td>383</td>
<td>96</td>
<td>√</td>
<td>?</td>
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</table>

560-670
Another view (originally prepared for Research Council) versus a set of *comparators* - see also *SPC Binder Samples*:

<table>
<thead>
<tr>
<th>University</th>
<th>TARU top 25 marks</th>
<th>research dollars</th>
<th>fed res dollars</th>
<th>NAS members</th>
<th>major faculty awards</th>
<th>Doctoral degrees</th>
<th>Postdoctorals</th>
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<td>2.0000</td>
<td>52.000</td>
<td>82.000</td>
<td></td>
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</tbody>
</table>

**Excellence is a stretched goal.**
Learning:

- 6 year graduation rate
- 2nd year retention rate
- Course completion rates
- Success on professional examinations (engineering, nursing, accounting)
- Scores on GRE, MCAT, LSAT, etc.
- Placement in post-graduate study, careers
- National Awards for student scholarship; teaching, advising, mentoring, ...
- Absence of Achievement Disparities
- Experience Abroad
  - Recruitment yields – undergraduate, graduates, postdoctorals, faculty, visiting faculty, speakers, ...
- Infrastructure to support success – IT, Library, Student Services, Professional Development at all levels
- Student Faculty Ratio
- Connected Learning!
Discovery:

*(Scholarly Productivity Index — a ranking of graduate programs at research universities based field adapted measures of productivity [http://chronicle.com/stats/productivity/])*

- Citations
- Publication Journal Impact
- National and International Collaborations
- Speakers and Sabbatical Visitors to MSU
- Participation in undergraduate research – Institutional support thereof
- Publications with undergraduate co-authors
- Student awards in Student Research
- Investments in infrastructure – Research Staff, Instrumentation, Library Expenditures,
  - *Recruitment yields – undergraduate, graduates, postdoctorals, faculty, visiting faculty, speakers,…*
- Infrastructure to support success – IT, Library, Student Services,
- Professional Development at all levels
- Carnegie Ranking
Engagement:
• Awards
• Carnegie Ranking
• Rates of participation, at every level, in outreach activities
• Service Learning embedded in the curriculum
• An MSU brand: students, graduates, faculty, and staff who are enlivened by stretching their capacity for leadership to fashion a more humane and just world

Summary:
Recall Second Question: What are the metrics?
Provisional Solution: Consider standard metrics as a point of departure; Then ask: what are we missing?
Then shape these rough hewn indicators to reflect and support emerging perspectives on vision, values, ...