The Challenges of Academic Affairs: Programs, Faculty, and Planning for the Future

Rodney A. Erickson
January 18, 2008
Three Related Aspects of Academic Affairs

• Academic programs and how they emerge from the faculty

• The structure and demographics of Penn State’s faculty

• The importance of strategic planning to future academic strength
The quality of academic programs is THE single most important reason why

- Students choose to attend a particular university
- Faculty are attracted and retained
Assessing Program Quality

- Quantitative Measures (e.g. student qualifications, licensure pass rates, faculty awards, placement success, etc.)

- Qualitative Measures (e.g. reputational rankings, student surveys, etc.)
Penn State has Many Highly Ranked Programs

- 90+ disciplinary programs and/or major subfields ranked in the Top 20 nationally
- 50+ in the Top 10 nationally
Curriculum Review Process for Undergraduate Programs
(Majors, Options, Minors)

Senate & Provost’s Office Review Process

Central Administration

Senate

Provost

Board of Trustees

Bulletin

Schedule of Courses

Curriculum Coordinator

Retention and Transfer Subcommittee

Curricular Affairs Committee

Curriculum Coordinator

College/Preliminary Administrative Peer Review Process

Colleges

Dean or Chancellor (VPCC)

College Representative on Curricular Affairs Committee

College Curriculum Committee

Formal Consultation (ACUE) 10 working day response

Colleges

Dean or Chancellor (VPCC)

College Representative on Curricular Affairs Committee

College Curriculum Committee

Academic Unit Head/DAA

Academic Units

Faculty

Academic Unit Curriculum Committee

Academic Unit Head/DAA

ACUE

(preliminary)

Faculty
Administrative Review Criteria for Curricular Proposals

• Alignment with University and college mission
• Availability of tenured or tenure-track faculty
• Student demand and market for graduates
• University-wide curricular integrity
• Physical and fiscal resources available
• Consultation within disciplinary community
### Penn State Majors, All Degrees
Fall 1997 and Fall 2007

<table>
<thead>
<tr>
<th></th>
<th>Fall 1997</th>
<th>Fall 2007</th>
</tr>
</thead>
<tbody>
<tr>
<td>Associate</td>
<td>24</td>
<td>27</td>
</tr>
<tr>
<td>Baccalaureate</td>
<td>210</td>
<td>232</td>
</tr>
<tr>
<td>Masters</td>
<td>194</td>
<td>204</td>
</tr>
<tr>
<td>Doctoral</td>
<td>106</td>
<td>109</td>
</tr>
<tr>
<td>Medical</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Law</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>536</strong></td>
<td><strong>574</strong></td>
</tr>
</tbody>
</table>
Penn State Minors
Fall 1997 and Fall 2007

Undergraduate Minors

<table>
<thead>
<tr>
<th></th>
<th>Fall 1997</th>
<th>Fall 2007</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>114</td>
<td>185</td>
</tr>
</tbody>
</table>

Any graduate program may offer a minor with 6 credits required for a master’s minor and 15 credits required for a doctoral minor. There are also 12 stand-alone interdisciplinary graduate minors.
Challenges in the Realm of Academic Programs

- Extending efforts to assess student learning outcomes
- Curricular integrity and disciplinary collaboration across multiple campuses
- Too many degree programs
- Difficulties in shedding old programs, both cultural and practical
- “Build It and They Will Come” philosophy is prevalent
- Some programs are costly to deliver and must be cross-subsidized by other programs
- The costs for technology, laboratories, and equipment for state-of-the-art education have risen enormously
Penn State Faculty
Penn State Members of the National Academies, p. 1

(*retired from Penn State)

George E. Andrews, Evan Pugh Professor of Mathematics
*Frank Aplan, Distinguished Professor of Metallurgy and Mineral Processing
Stephen J. Benkovic, Evan Pugh Professor of Chemistry
Welford A. Castelman, Jr., Evan Pugh Professor of Chemistry
Moses H. W. Chan, Evan Pugh Professor of Physics
Daniel J. Cosgrove, Eberly Professor of Biology
*Eric Cross, Evan Pugh Professor of Electrical Engineering
*C. McCollister Evarts, University Professor
Nina Fedoroff, Evan Pugh Professor of Biology
and Verne M. Willaman Chair in Life Sciences
*David Geselowitz, Distinguished Professor of Bioengineering
*Laurie M. Gunter, Professor of Nursing
*Charles L. Hosler, Professor of Meteorology
*Arthur Humphrey, Professor of Chemical Engineering
Penn State Members of the National Academies, p. 2

(*retired from Penn State)

Mary Jane Irwin, Evan Pugh Professor of Computer Engineering and A. Robert Knoll Chair in Engineering
Gerald D. Mahan, Distinguished Professor of Physics and Materials
*Howard E. Morgan, Professor of Physiology
Masatoshi Nei, Evan Pugh Professor of Biology
*Robert Newnham, Alcoa Professor of the Solid State
Kwadwo Osseo-Asare, Distinguished Professor of Metallurgy and Energy and GeoEnvironmental Engineering
Roger Penrose, Francis R. and Helen M. Pentz Distinguished Professor of Physics
*William Pierce, Evan Pugh Professor of Surgery
*Raja V. Ramani, Professor of Mining and GeoEnvironmental Engineering
*C. R. Rao, Professor and Eberly Family Chair in Statistics
Catherine Ross, Professor and Dorothy Foehr Huck Chair in Nutrition
Penn State Members of the National Academies, p. 3

(*retired from Penn State)

*Della Roy, Professor of Materials Science
*Rustum Roy, Evan Pugh Professor of the Solid State
*William T. Sanders, Evan Pugh Professor of Archaeological Anthropology
*Robert K. Selander, Eberly Professor of Biology
*David A. Shirley, Professor of Physics
*Philip. S. Skell, Evan Pugh Professor of Chemistry
James H. Tumlinson, Ralph O. Mumma Professor of Entomology
Alan C. Walker, Evan Pugh Professor of Anthropology and Biology
Growth in Penn State’s Full-Time Faculty 1998-2007

<table>
<thead>
<tr>
<th></th>
<th>Fall 1998</th>
<th>Fall 2007</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>4429</td>
<td>5335</td>
</tr>
</tbody>
</table>

Excludes PCT
Full-Time Faculty – Fall 2007

<table>
<thead>
<tr>
<th></th>
<th>Tenured</th>
<th>Pre-Tenure</th>
<th>Other</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Univ Park</td>
<td>1324</td>
<td>43%</td>
<td>387</td>
<td>1360</td>
</tr>
<tr>
<td>Campuses (incl GV)</td>
<td>569</td>
<td>39%</td>
<td>299</td>
<td>605</td>
</tr>
<tr>
<td>College of Medicine</td>
<td>189</td>
<td>25%</td>
<td>80</td>
<td>485</td>
</tr>
<tr>
<td>DSL</td>
<td>22</td>
<td>59%</td>
<td>1</td>
<td>14</td>
</tr>
</tbody>
</table>
Penn State’s Full-Time Faculty 1998-2007: Percentages by Category

Male
Female
Minority

Excludes PCT

<table>
<thead>
<tr>
<th></th>
<th>1998</th>
<th>2007</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female</td>
<td>1316</td>
<td>1895</td>
</tr>
<tr>
<td></td>
<td>30%</td>
<td>36%</td>
</tr>
<tr>
<td>Minority</td>
<td>530</td>
<td>910</td>
</tr>
<tr>
<td></td>
<td>12%</td>
<td>17%</td>
</tr>
</tbody>
</table>
Faculty Headcounts by Appointment Type 2000-2007

All-University except PCT
Excludes PCT

<table>
<thead>
<tr>
<th></th>
<th>Univ Park</th>
<th>Campuses (incl GV)</th>
<th>College of Medicine</th>
<th>DSL</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fall 1998</strong></td>
<td>118</td>
<td>155</td>
<td>0</td>
<td>10</td>
</tr>
<tr>
<td><strong>Fall 2007</strong></td>
<td>336</td>
<td>255</td>
<td>2</td>
<td>12</td>
</tr>
</tbody>
</table>
Part-Time, Contingent, and Tenure-Line Trends: The National Picture

Percentage of New Full-Time Hires Who are Non-Tenure Line: University Park and Big Ten/AAU Peers

Source: IPEDS December 2007
Percentage of New Full-Time Hires Who are Non-Tenure Line: Commonwealth Campuses and Peers

Student Credit Hours Taught by Appointment Type
Fall 1999 – Fall 2006

<table>
<thead>
<tr>
<th>Appointment Type</th>
<th>Fall 1999</th>
<th>Fall 2006</th>
</tr>
</thead>
<tbody>
<tr>
<td>Full-Time Standing</td>
<td>48%</td>
<td>40%</td>
</tr>
<tr>
<td>Full-Time Fixed Term</td>
<td>21%</td>
<td>32%</td>
</tr>
<tr>
<td>Part-Time Faculty</td>
<td>18%</td>
<td>17%</td>
</tr>
<tr>
<td>Graduate Assistants</td>
<td>9%</td>
<td>8%</td>
</tr>
<tr>
<td>Other (Execs, Staff...)</td>
<td>4%</td>
<td>3%</td>
</tr>
</tbody>
</table>

Excludes PCT, DSL, COM
Tenure Rates at Ten Research Universities: 1997-98 Entrants and their Tenure Achievement through 2004-05

Florida
Illinois
Iowa
Maryland
Michigan
Northwestern
Penn State
Rutgers
Pittsburgh
Wisconsin

Penn State 9 Peer Universities
Associate Professors Year in Rank

The chart shows the average years in rank for Associate Professors across different categories and years.

### Year # Associate Professors Average Years in Rank

<table>
<thead>
<tr>
<th>All Faculty</th>
<th>2002</th>
<th>858</th>
<th>6.8</th>
</tr>
</thead>
<tbody>
<tr>
<td>2007</td>
<td>970</td>
<td>6.6</td>
<td></td>
</tr>
</tbody>
</table>
Turnover Rates by Academic Appointment

University-wide, 2005-06. Librarian and research appointments are included with their respective professorial ranks.
Age Distribution of Full-Time Faculty
University-wide, 1998-2007

<table>
<thead>
<tr>
<th>60 &amp; above</th>
<th>1998</th>
<th>2007</th>
</tr>
</thead>
<tbody>
<tr>
<td>Under 30</td>
<td></td>
<td></td>
</tr>
<tr>
<td>30-39</td>
<td></td>
<td></td>
</tr>
<tr>
<td>40-49</td>
<td></td>
<td></td>
</tr>
<tr>
<td>50-59</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- Under 30: 1998 (5%), 2007 (5%)
- 30-39: 1998 (25%), 2007 (25%)
- 40-49: 1998 (30%), 2007 (30%)
- 50-59: 1998 (20%), 2007 (20%)
- 60 & above: 1998 (10%), 2007 (20%)

60 & above: 1998 (400), 2007 (781)
Challenges in Hiring and Retaining a World-Class Faculty

- A highly competitive environment among top universities
- “It’s not just the faculty”
- Hiring more tenure track faculty with tight budgets
- Hiring additional women and minority faculty
- Barriers to interdisciplinary interests
- Developing the talents of new faculty
- Making *strategic* decisions in faculty hiring
Unit-Level Strategic Plans

(due June 2008)

• 5-year plan with longer-range vision
• Specific strategies for achieving the vision
• Student learning outcomes assessment
• Relationship to diversity plan
• Continued central budget recycling
• Alternative scenarios based on funding availability
University Strategic Planning Council (USPC)

Charge:
• Develop overall 5-Year University plan
• Articulate strategies to achieve goals
• Utilize full resources of the University’s expertise
• Benefit from the themes and ideas in unit plans
• Consider the longer-range future of the University
Longer-Range Issues

• The future of the Land Grant university in the 21st century
• Balancing access and tuition with the resources needed for academic excellence
• Strategies for building faculty strength and attracting top students
• How we achieve greater student-centeredness
• Our challenges for achieving greater diversity
• Ways to promote greater interdisciplinarity
• Our multi-campus structure and missions
• Information technologies as a shaping force
• Ways to operate the University more effectively and efficiently
University Strategic Planning Council Membership, pg. 1

• Rod Erickson, Chair
• Michael Adewumi, Vice Provost for International Programs
• Dan Alexander, Undergraduate student, Arch. Engineering
• Marianne Alexander, Board of Trustees
• Ingrid Blood, Professor of Comm. Sciences and Disorders, Chair-Elect of University Faculty Senate
• James Broadhurst, Board of Trustees
• Melanie Doebler, Penn State Public Broadcasting
• Yvonne Gaudelius, Assistant Vice President and Assoc. Dean for Undergraduate Education
• Lynda Goldstein, Associate Professor, English and Women’s Studies, Penn State Wilkes-Barre
• Kevin Grigsby, Penn State College of Medicine and Hershey Medical Center
• Dan Hagen, Professor of Animal Science, College of Agricultural Sciences
University Strategic Planning Council
Membership, pg. 2

• Sam Hayes, Jr., Board of Trustees
• Don Heller, Director, Center for the Study of Higher Education, Professor of Education
• Al Horvath, Vice President for Finance and Business
• Dan Larson, Dean, Eberly College of Science
• Anita McDonald, Chancellor, Penn State DuBois
• Eva Pell, Senior VP for Research and Dean of the Graduate School
• Steve Peterson, Professor of Political and Public Affairs, Penn State Harrisburg
• Victoria Sanchez, Assistant Vice Provost for Educational Equity
• Karen Thole, Professor and Dept. Head, Mechanical and Nuclear Engineering, College of Engineering
• Gene Tyworth, Dept. Chair and Professor of Supply Chain Management, Smeal College of Business
University Strategic Planning Council Membership, pg. 3

With support from:

• Steve Curley, University Budget Officer
• Mike Dooris, Director of Planning and Assessment, Office of Planning and Institutional Assessment
• Louise Sandmeyer, Executive Director, Office of Planning and Institutional Assessment
• Rachel Smith, Financial Officer and Special Assistant to the Executive Vice President and Provost
Questions and Comments