Study Design Questions: Analytic Charge Questions for the Seven NJIT Groups

Meeting with Rapid Assessment and Steering Committee
September 7, 2009
Hosts: Norbert Elliot, Stephen J. Tricamo, Eugene P. Deess
The MSCHE Self-Study Research Question Design Process; The NJIT Adaptation

• Task 1. Review Key Documents
• Task 4. Develop Questions You Would Like Answered in Terms of the Fourteen Standards
The NJIT Self-Study Research Question Design Heuristic

<table>
<thead>
<tr>
<th>Designing Analytic Charge Questions (process adapted from Self Study: Creating A Useful Process, p. 34)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>MSCHE Standard</strong></td>
</tr>
<tr>
<td>1. Mission and Goals</td>
</tr>
<tr>
<td>2. Planning, Resource Allocation, and Institutional Renewal</td>
</tr>
<tr>
<td>3. Institutional Resources</td>
</tr>
<tr>
<td>4. Standards: Leadership and Governance</td>
</tr>
<tr>
<td>5. Administration</td>
</tr>
<tr>
<td>6. Integrity</td>
</tr>
<tr>
<td>7. Institutional Assessment</td>
</tr>
<tr>
<td>8. Student Admissions and Retention</td>
</tr>
<tr>
<td>9. Student Support Services</td>
</tr>
<tr>
<td>10. Faculty</td>
</tr>
<tr>
<td>11. Educational Offerings</td>
</tr>
<tr>
<td>12. General Education</td>
</tr>
<tr>
<td>13. Related Educational Activities</td>
</tr>
<tr>
<td>14. Assessment of Student Learning</td>
</tr>
</tbody>
</table>

NJIT New Jersey's Science & Technology University

THE EDGE IN KNOWLEDGE
The NJIT Self-Study Research Question Design Question Design Heuristic

1. MSCHE Standard
2. Identify the key components of the standard that are most relevant to the institution’s own goals and activities
3. Determine how this standard relates to other standards and the Seven NJIT Groups
4. What assessment has occurred in this area?
5. What improvements should we consider?
6. Analytic Charge Questions for the Seven NJIT Groups
7. What existing documents can be used (and cited) to fulfill this Charge?
8. What new research, if any, should be undertaken during the self-study?
Example: Admission, Retention, and Student Support Services—The Undergraduate Experience

Question Design
1. Identify the MSCHE Standard

MSCHE

- MSCHE Standard
  - Standard 8: Student Admission and Retention
  - Standard 9: Student Support Services

NJIT

- Group 5: Admission and Retention: Designing the Student-Centered Campus
- Standard 8: Student Admission and Retention
- Standard 9: Student Support Services
- Chair: Sui-Hoi (Edwin) Hou
- Vice Chair: Barry Cohen
- Advisor: Tony Howell
2. Identify key components of the standard most relevant to the institution’s own goals and activities

**NJIT**

- Group 5: Admission and Retention: Designing the Student-Centered Campus
  - Standard 8: Student Admission and Retention
  - Standard 9: Student Support Services

**Relevant Components**

- What is the history of admission and retention since our 2002 MSCHE visit?
- Did the 2007 Periodic Review Report identify any important trends in admission and retention?
- What are our projected admission and retention goals and strategies?
- How are we measuring admission and retention?
3. Determine how this standard relates to other standards and the Seven NJIT Groups

Relevant Components

• What is the history of admission and retention since our 2002 MSCHE visit?
• Did the 2007 Periodic Review Report identify any important trends in admission and retention?
• What are our projected admission and retention goals and strategies?
• How are we measuring admission and retention?

Other Groups

• Group 4: Educational Outcomes: The Measurement of Learning Ability
  – Standard 7: Institutional Assessment
  – Standard 14: Assessment of Student Learning
  – Chair: John K. Bechtold
  – Vice Chair: Katia Passerini
  – Institutional Research Advisor: Eugene P. Deess

• Group 7: Curriculum: Evidence-centered, Research and Professional-based Instruction
  – Standard 11: Educational Offerings
  – Standard 12: General Education
  – Standard 13: Related Educational Activities
  – Chair: Robert Friedman
  – Curriculum Advisor: Stephen J. Tricamo
  – eLearning Advisor: Gale T. Spak
4. What assessment has occurred in this area?

**Admission**
- Established admission goals as part of University Strategic Plan: 2004-2010; 2010-2015
- Subsequent longitudinal studies by Institutional Research
  - Reflective and Documentary Orientation

**Retention**
- External review of placement processes by Vice President of Academic and Student Services
- Placement process revised in writing and mathematics
- Studies by Institutional Research and departments on retention as a result of new placement processes
  - Reflective and Documentary Orientation
5. What improvements should we consider?

**Admission**

- What are the challenges of maintaining quality, diversity, and growth?
- How may we best meet these challenges without engaging in value dualism?
- Are there ways of increasing the quality and diversity of our admitted students?
- Are we using the best empirical admissions models as measured by prediction of success?
- Are there unique new programs that might yield greater diversity?
  - Progressive Orientation

**Retention**

- Are our placement procedures yielding retention?
- Is our curriculum yielding retention?
- What are our cohorts of students, and how may we best retain them?
- Are there progression guidelines and studies within the academic major?
- What do we do when students fail to progress within the academic major?
  - Progressive Orientation
5 continued. What improvements should we consider? **Progressive Orientation**

- If the Albert Dorman Honors College, the Equal Opportunity Program, and the Athletic Program are taken as models of admission and retention, how can quality, diversity, and growth be maintained by further implementing these models?
- Might, for example, we consider grouping students by admitted cohort in university colleges (e.g., Fenser College) that focus on retention? What planning, infrastructure, and assessment would be required to achieve this shift towards localism?
6. Analytic charge questions to Group 6

Admission

• 1. How may we best trace the history of admissions at NJIT since 2002 with attention to quality, diversity, and growth.
• 2. How have we met the challenges of attending to quality, diversity and growth in the past?
• 3. How will we meet these challenges in 2009, 2010, 2011, and 2012?
• 4. What are our current measures of predicting success?
• 5. What new measures might we consider as predictors of success?

Retention

• 1. What are the best models of retaining students at NJIT?
• 2. Are there instructional barriers, within the major curriculum and the GUR, that impact retention?
• 3. How may we best identify cohorts of students for retention study?
• 4. What are the retention patterns for the following groups?
  – Men; Women
  – African American, Native American, Asian, Hispanic, and White
• 5. What retention patterns are evident among student athletes?
7. What existing documents can be used (and cited) to fulfill this charge?

- University Strategic Plan: 2004-2010; 2010-2015
- Report of external review of placement processes by Vice President of Academic and Student Services
- Summary of placement process revised in writing and mathematics
- Studies by Institutional Research and departments on retention as a result of new placement processes
8. What new research, if any, should be undertaken during the self-study?

**Admission**

- What have been our admission patterns regarding the following groups since 2002?
  - Men; Women
  - African American, Native American, Asian, Hispanic, and White
  - Student athletes
- Are there regression models that may tell us more about the best admission models?

**Retention**

- What studies may we undertake of remediation in the first year and the relationship of basic skills placement and retention?
- What is the relationship between GUR and retention?
- What is the relationship of course sequencing in the academic major and retention?
- What use can we make of the National Survey of Student Engagement and the Voluntary System of Accountability?