IE+ AT THE CABINET LEVEL: AN ORGANIZATIONAL CASE STUDY

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Catherine Scott, Director of Educational Effectiveness
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“Never let a serious crisis go to waste.”

- Rahm Emmanuel
  White House Chief of Staff (2009-10)
  Mayor of Chicago (2011-19)
Overview

- Current state
- How we got here
- Structural & cultural differences
- Takeaways
Current State
## Stony Brook University

<table>
<thead>
<tr>
<th>Fall 2023 headcount enrollment</th>
<th>Median SAT 2023 (test optional)</th>
<th>Avg. high school GPA</th>
</tr>
</thead>
<tbody>
<tr>
<td>25,865</td>
<td>1400</td>
<td>93.5</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Undergrad Graduate</th>
<th>Receive Pell grants</th>
<th>White</th>
<th>Asian</th>
<th>URM</th>
</tr>
</thead>
<tbody>
<tr>
<td>68%</td>
<td>38%</td>
<td>30%</td>
<td>28%</td>
<td>19%</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Fall 2023 employees incl. health system</th>
<th>Fall 2023 faculty full-time &amp; part-time</th>
<th>U.S. News &amp; World Report Rank 2024</th>
</tr>
</thead>
<tbody>
<tr>
<td>16,309</td>
<td>3,028</td>
<td>#58</td>
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<table>
<thead>
<tr>
<th>USD annual budget 2024</th>
<th>Founded</th>
<th>Joined AAU</th>
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<tbody>
<tr>
<td>4.5 Billion</td>
<td>1957</td>
<td>2001</td>
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</tbody>
</table>

- Founded: 1957
- Joined AAU: 2001
- Annual Budget: 4.5 Billion USD
- Established in 1957
- Joined AAU in 2001
- U.S. News & World Report Rank: #58

- Median SAT: 1400 (test optional)
- Average high school GPA: 93.5
- Undergraduate: 68%, Graduate: 32%
- Pell Grant Recipients: 38%
- White: 30%, Asian: 28%, URM: 19%
- Employees: 16,309 (including health system)
- Faculty: 3,028 (full-time & part-time)

- Stony Brook University is ranked #58 in the U.S. News & World Report Rank 2024.
Mission and Strategic Goals
We enable Stony Brook University to improve through the collection, analysis, and use of data.

**Collect** administrative and contextual data using high-quality processes for extraction, storage, curation, indexing, and disposition.

**Understand** the data collected by us and by others to know its meaning, context, limitations, and implications for action.

**Communicate** data and analyses clearly and effectively to internal and external audiences.

**Improve** how the university and all members of its community achieve their goals.
Collaborations Made Easier By Cabinet-Level Position
Work Orders Dashboards
Partners: Institutional Research, Analytics, Facilities & Services

Employee Metrics

Weekly Employee Hours Booked and Exception Hours
Selected employee is on West Schedule

Christina
67.6 hrs
Justin T.
66.0 hrs
Beyonce
66.0 hrs
Justin B.
74.0 hrs
Selena
72.0 hrs
Harry
72.0 hrs
Brittney
72.0 hrs

Average Hours Booked Plus Exceptions per Day
Employee: All

Monday
4.6 hrs
Tuesday
4.6 hrs
Wednesday
4.6 hrs
Thursday
4.3 hrs
Friday
3.0 hrs

Office of Institutional Research, Planning & Effectiveness and Office of Administration & Finance | DATA basic TIME: 23/21 PM
Energy Dashboards
Partners: Analytics, Data Warehousing, Sustainability
Weekly Pulse Survey Partners: Institutional Research, Analytics, Student Affairs

Themes from coded comments (2022-23)
Program Outcomes
Partners: Educational Effectiveness, Institutional Research

Anthropology B.A.

LEARNING OBJECTIVES
1. Communication: Students must be able to write and speak in a manner that is clear and effective, demonstrating knowledge of American, colonial, and modern American literature.
2. Composition: Students must be able to read and analyze literature, demonstrating knowledge of American, colonial, and modern American literature.
3. Articulation: Students must be able to communicate their ideas and thoughts in a clear and concise manner.
4. Critical Thinking: Students must be able to think critically and analyze information, demonstrating knowledge of American, colonial, and modern American literature.

SUCCESS RATES
94.1%
6-year graduation rate
4.30
Any year to degree

MEDIAN EARNINGS
$567,494
10 years after graduation
$33,272
5 years after graduation
$26,031
1 year after graduation

PLACEMENT
62.2%
Employed in field
37.1%
Continuing education

CAREERS ENGLISH B.A. GRADUATES PURSUE
- Author
- Television Entertainment Writer
- Computer Games Designer
- Screen Writer
- Educational/Communications Manager,不通
- Creative Writer

CAREERS ANTHROPOLOGY B.A. GRADUATES PURSUE
- Archaeologist
- Field Worker
- Museum Curator
- Cultural Affairs Director
- Social Science
- Cultural Anthropologist
- Cultural Researcher

English B.A.

LEARNING OBJECTIVES
1. Communication: Students must be able to write and speak in a manner that is clear and effective, demonstrating knowledge of American, colonial, and modern American literature.
2. Composition: Students must be able to read and analyze literature, demonstrating knowledge of American, colonial, and modern American literature.
3. Articulation: Students must be able to communicate their ideas and thoughts in a clear and concise manner.
4. Critical Thinking: Students must be able to think critically and analyze information, demonstrating knowledge of American, colonial, and modern American literature.

SUCCESS RATES
74.6%
6-year graduation rate
4.20
Any year to degree

MEDIAN EARNINGS
$65,139
10 years after graduation
$31,662
5 years after graduation
$29,093
1 year after graduation

PLACEMENT
74.8%
Employed in field
48.3%
Continuing education

CAREERS MECHANICAL ENGINEERING B.E. GRADUATES PURSUE
- Aerospace Engineer
- Automotive Engineer
- Environmental Engineer
- Industrial Engineer
- Materials Engineer: Industrial Engineer
- Engineers
- Research Engineers
- Engineers
- Materials Engineers

Mechanical Engineering B.E.

LEARNING OBJECTIVES
1. Communication: Students must be able to write and speak in a manner that is clear and effective, demonstrating knowledge of American, colonial, and modern American literature.
2. Composition: Students must be able to read and analyze literature, demonstrating knowledge of American, colonial, and modern American literature.
3. Articulation: Students must be able to communicate their ideas and thoughts in a clear and concise manner.
4. Critical Thinking: Students must be able to think critically and analyze information, demonstrating knowledge of American, colonial, and modern American literature.

SUCCESS RATES
79.0%
6-year graduation rate
3.94
Any year to degree

MEDIAN EARNINGS
$104,573
10 years after graduation
$83,892
5 years after graduation
$57,625
1 year after graduation

PLACEMENT
71.4%
Employed in field
39.0%
Continuing education

CAREERS ANTHROPOLOGY B.A. GRADUATES PURSUE
- Archaeologist
- Field Worker
- Museum Curator
- Cultural Affairs Director
- Social Science
- Cultural Researcher
- Cultural Anthropologist
- Cultural Researcher

FAR BEYOND
Transformation
Transformation of Assessment Function
Assessment Structures Prior to 2022

**Assessment Task Force**
2011-2014

- Provost
- Assessment Task Force (Faculty)

**Office of Academic Assessment**
2017-2021

- Provost
- Vice Provost UG Education
- Director of Academic Assessment
- Programmer/Analyst

Numerous accreditation recommendations about assessment (2014)

SLOW Progress. Disbanded 2021
Office of Educational Effectiveness (2022 - )
Accomplishments - Assessment

Academic Programmatic Assessment

• Every academic program has an identified assessment coordinator.
• Achieved a 95% collection rate of academic assessment reports in both 2022 and 2023.
• Collected a total of 350 assessment reports across two years.

General Education Assessment

• Evaluated 39,612 duplicated students.
• Assessed performance across all 69 learning outcomes.
• Conducted assessments in 210 course sections involving 107 faculty members.
# Accomplishments – Groups, Policies & Procedures

<table>
<thead>
<tr>
<th>Group/Committee</th>
<th>Accomplishments</th>
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</table>
| **Assessment Council**                                                        | • Assessment policy  
                                 | • Feedback mechanism |
| **General Education Advisory Committee (GEAC)**                               | • Student learning outcome alignment and modification |
| **Re-Booted Program Review**                                                   | • Staffed ad hoc committee to develop program review policy & procedures  
                                 | • Facilitation of 8 programs through new process in 2023-24 |
| **Accreditation Advisory Group**                                              | • Liaisons from programs with specialized accreditation |
# Accomplishments - Events

<table>
<thead>
<tr>
<th>Event</th>
<th>Highlights</th>
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| Annual Assessment Symposium                | • 22: Over 80 attendees  
|                                            | • 23: Over 100 attendees                                                 |
| Assessment Recognition                      | • 23: Assessment champions  
|                                            | • 24: Excellence in Educational Effectiveness recipients                  |
| Accreditation Advisory Committee Retreat   | • 23: Support needs discussion  
|                                            | • 24: Retreat - shared resources, EIE needs, & best practices            |
Accomplishments – Homegrown Content Management System

Office of Educational Effectiveness
Content Management System
Challenges

- Clarifying distinctions to external stakeholders
- Clarifying internal distinctions
- Time constraints for collaboration & innovation
Transformation of IR/IE Function
Evolution from Institutional Research to IE+

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<tr>
<td>• Traditional IR</td>
<td>• New leadership</td>
<td>• Data strategy</td>
<td>• Accreditation</td>
</tr>
<tr>
<td>• Students</td>
<td>• New mission/scope</td>
<td>• Visualization</td>
<td>• Assessment</td>
</tr>
<tr>
<td>• Courses</td>
<td>• Restructuring</td>
<td>• Modeling</td>
<td>• Strategic plan</td>
</tr>
<tr>
<td>• Faculty</td>
<td>• New technology</td>
<td>• Policy analysis</td>
<td>monitoring</td>
</tr>
<tr>
<td>• “We deal with numbers without the dollar sign”</td>
<td>• Embedded EDA Director</td>
<td>• Leader: Assoc. VP</td>
<td>• Analyst consolidated</td>
</tr>
<tr>
<td>• Leader: Director</td>
<td>• Data governance</td>
<td>• Leader: VP</td>
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</tbody>
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• To what extent are we accomplishing our mission? How do we know? How do we improve?
Structural and Cultural Differences
# Institutional Research, Business Intelligence, & Assessment Structural Differences

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<thead>
<tr>
<th></th>
<th>Business Intelligence</th>
<th>Institutional Research</th>
<th>Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Organizational</strong></td>
<td>IT</td>
<td>Provost (sometimes Planning)</td>
<td>Provost</td>
</tr>
<tr>
<td><strong>Reporting</strong></td>
<td></td>
<td></td>
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<tr>
<td><strong>Data Realms</strong></td>
<td>ERP</td>
<td>Student &amp; Faculty</td>
<td>Programmatic</td>
</tr>
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<td></td>
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<tr>
<td><strong>Constituencies</strong></td>
<td>Internal Admin. Functions Deans</td>
<td>Internal &amp; External Academic Functions Deans &amp; Central Admin</td>
<td>Internal Academic</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>External Accreditors</td>
</tr>
<tr>
<td><strong>Data Usage</strong></td>
<td>Operational Decision Support</td>
<td>Official Reporting Decision Support</td>
<td>Internal decision support</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>External accountability</td>
</tr>
<tr>
<td><strong>Age of</strong></td>
<td>Newer</td>
<td>Well Established (Predates BI)</td>
<td>Since late 1990s early 2000s</td>
</tr>
<tr>
<td><strong>Organization</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Institutional Research, Business Intelligence, & Assessment Cultural Differences

<table>
<thead>
<tr>
<th>Educational Background</th>
<th>Business Intelligence</th>
<th>Institutional Research</th>
<th>Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>BA/BS, MS, IT-related</td>
<td>PhD common, Social Sci or Stats</td>
<td>MA/MS or PhD Education / Soc Sci.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Career Background</th>
<th>Business Intelligence</th>
<th>Institutional Research</th>
<th>Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not Academic</td>
<td>Not Higher Ed</td>
<td>Not Higher Ed</td>
<td>Higher Ed</td>
</tr>
<tr>
<td>Sometimes</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Not Higher Ed</td>
<td>Higher Ed</td>
<td>Higher Ed</td>
<td>Higher Ed</td>
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<table>
<thead>
<tr>
<th>Career Opportunities</th>
<th>Business Intelligence</th>
<th>Institutional Research</th>
<th>Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Outside Higher Ed</td>
<td></td>
<td>Higher Ed</td>
<td>Higher Ed</td>
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<tr>
<td>Higher Ed</td>
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<table>
<thead>
<tr>
<th>Data Manipulation</th>
<th>Business Intelligence</th>
<th>Institutional Research</th>
<th>Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>A Crime</td>
<td>A Requirement</td>
<td>Another unit’s responsibility</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Data Openness</th>
<th>Business Intelligence</th>
<th>Institutional Research</th>
<th>Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>&quot;Democratization of Data&quot;</td>
<td>Manage Carefully</td>
<td>Manage Very Carefully</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Data Quality</th>
<th>Business Intelligence</th>
<th>Institutional Research</th>
<th>Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Provenance Fidelity to Source</td>
<td>Conform to Definition; Fitness for Use; Consistency</td>
<td>Accepted as Imperfect</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Data Understanding</th>
<th>Business Intelligence</th>
<th>Institutional Research</th>
<th>Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operational &amp; Managerial Context</td>
<td>Institutional &amp; Strategic Context</td>
<td>Programmatic Context</td>
<td></td>
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</tbody>
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<table>
<thead>
<tr>
<th>Agility</th>
<th>Business Intelligence</th>
<th>Institutional Research</th>
<th>Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Generally Slow &amp; Deliberate Enterprise Perspective</td>
<td>Responsive to Ad Hoc Requests</td>
<td>Iterative; limited by partner and institutional capacities</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Attitude</th>
<th>Business Intelligence</th>
<th>Institutional Research</th>
<th>Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Optimistic</td>
<td></td>
<td>Skeptical</td>
<td>Collegial</td>
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<table>
<thead>
<tr>
<th>Organizational IQ</th>
<th>Business Intelligence</th>
<th>Institutional Research</th>
<th>Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Can be Strong in ERP- Related Areas</td>
<td>Strong in Academic-Related Functions</td>
<td>Strong Interpersonal Skills, Esp. w Faculty</td>
<td></td>
</tr>
</tbody>
</table>

Final Thoughts
Takeaways-How we got here

Organizational difficulties drove many of the developments

Pre-existing relationships among leaders (standing meetings, committees, etc.); evolved into structure based strengths

Leaders had multiple organizational plans prepared for when opportunities arose
Takeaways-Why it works

More than IR is required in the portfolio of a cabinet member

Resources are required (and were provided) to operate at a high level

The right (talented) people into the right roles

Transparency/communication is a new value; the matrixed structure enables this and requires it.