Transforming an Institutional Culture

Integrating Undergraduate Research, Scholarship, and Creative Activity into the Fabric of The College of New Jersey

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TCNJ THE COLLEGE OF NEW JERSEY

TCNJ School of Science

Five Academic Departments

- Biology
- Chemistry
- Computer Science
- Mathematics & Statistics
- Physics

& Self-designed majors

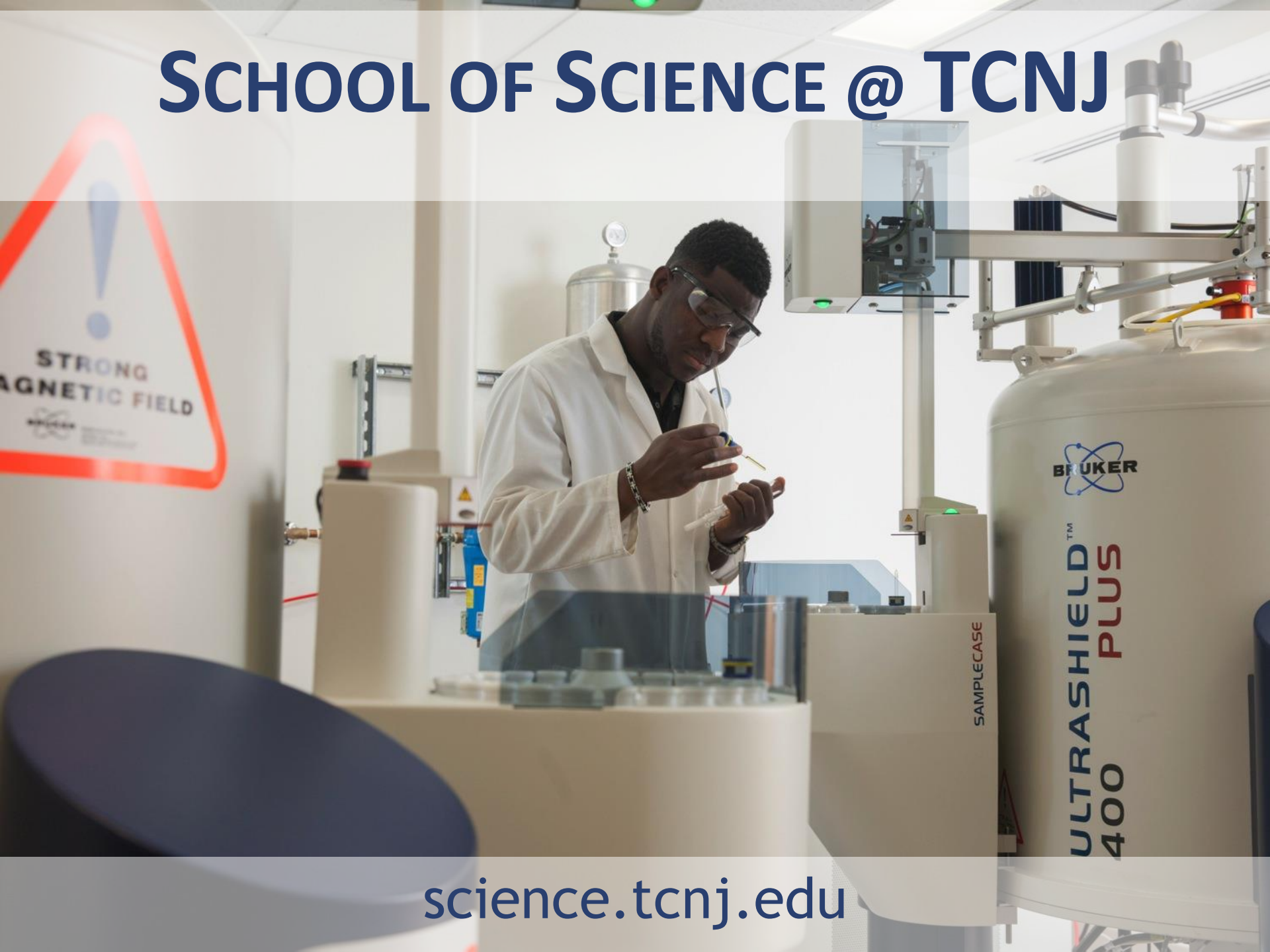
& Many interdisciplinary programs/connections

Enrollment

~1,100 student majors

~15,500 student enrollments in courses

SCHOOL OF SCIENCE @ TCNJ



science.tcnj.edu

Institutionalizing URSCA at TCNJ

Example Mechanisms

- One of TCNJ's five signature experiences.
- A comprehensively transformed curriculum.
- A comprehensive faculty work load system.
- Inclusion into the documents and practices associated with faculty reappointment, tenure, and promotion.
- A council within the shared governance system.
- A full-immersion summer program—MUSE, or Mentored Undergraduate Summer Experience.
- An institutional grant program, providing faculty with additional re-assigned time for scholarship.
- An endowed professorship in faculty–student scholarly engagement.
- An annual conference—The Celebration of Student Achievement.
- An annually published *Journal of Student Scholarship*.

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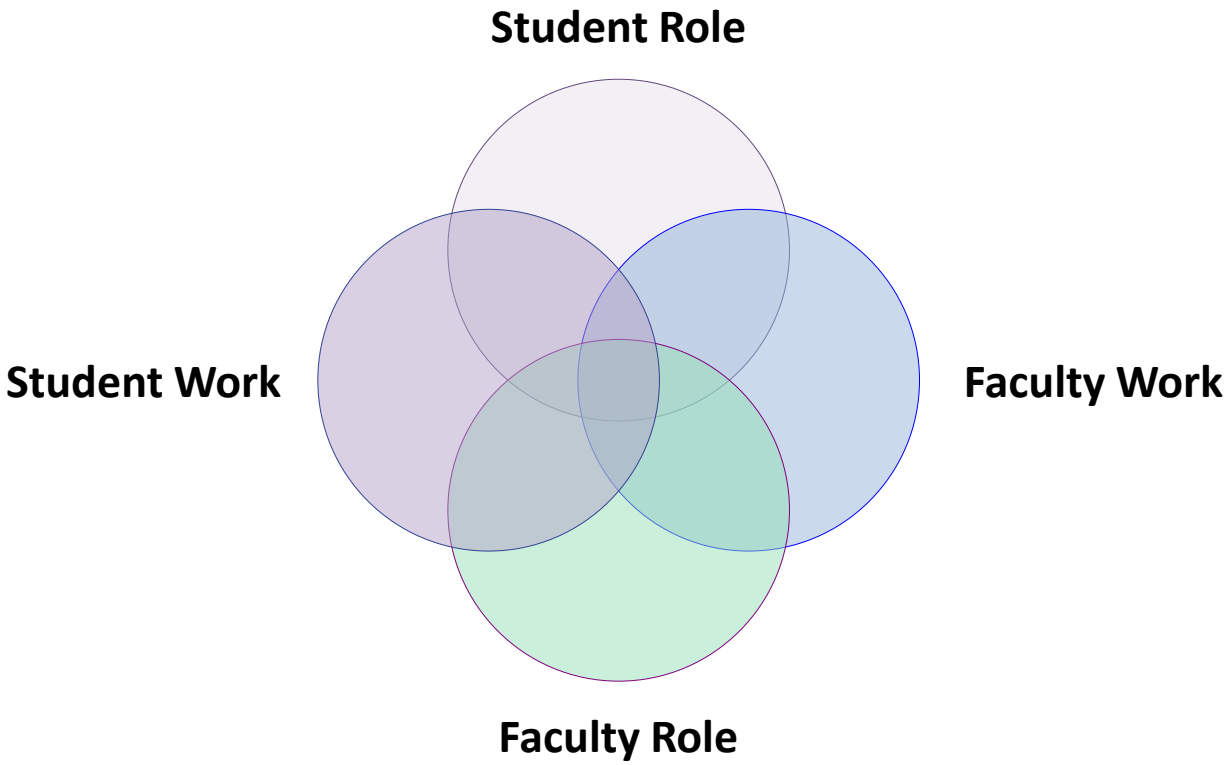
Academic Transformation at TCNJ

Reconceptualizing Learning



TCNJ Case Study Overview

Academic Transformation at TCNJ

- Transformation of Student Work
- Transformation of Faculty Work
- Aligning Faculty Workload and T&P

Article in *Inside Higher Ed,* October 16, 2014.
"Faculty Work, Student Success." By Colleen Flaherty.

Transforming Student Work

Transforming Student Work

Goals

- Develop programs that **intellectually challenge** students
- Interact with students both in and out of the '**classroom**'
- Convey a strong sense of **inquiry** and how knowledge is acquired in the disciplines
- Thoroughly assess student learning **outcomes**

Transforming Student Work

Overview and Summary

- "Transformed" the entire College curriculum, providing students with more rigor, more flexibility, and credit for high-impact, engaged learning experiences
  - Basic course "foot print" did not change
  - Focused on learning outcomes, not seat time
- Comprehensive effort with an ambitious timeline
  - Transformed general education, first-year experience, and all majors curricula in 18 months
- Subsequently, the Science programs have integrated research experiences into courses vertically through the four-year curriculum

Transforming Student Work

Overview and Summary

- Shifted from a credit hour-based system to a course unit-based system
- Transformed each course to be focused on learning outcomes, not seat time or content – each course unit effectively became a 4-credit hour course
- Institutional ideal for course distribution
  - 1/3 in liberal learning
  - 1/3 in the major
  - 1/3 in a second major, minor(s), or unrestricted electives

Transforming Student Work

Curriculum Comparison

Old Credit-based System	New Course-based System
5 classes per semester	4 classes per semester
10 classes per year	8 classes per year
Typical class is 3 credits	Typical class is 4 credits (1 course unit)
120-128 credit hours needed to graduate	32-34 courses needed to graduate

Transforming Faculty Work

Transforming Faculty Work

Goals

- Shift from a teaching & research culture to a **teacher-scholar culture**
- Provide **clear expectations** about scholarship and especially the integration of teaching and scholarship
- Promote **intellectual exchange** among the faculty
- Provide **time and resources** for faculty to engage students and participate in the advancement of their fields

Transforming Faculty Work

Overview and Summary

- Shifted from a traditional teaching load system to a comprehensive faculty work load system
- Provided in-load credit for:
  - Engaging students outside of the classroom in high-impact learning experiences, including URSCA
  - Mentoring and advising
  - Scholarship
  - Course design and curriculum development
- Reconceptualized the 4:4 teaching load – shifted to a 3:3 course load

Transforming Faculty Work

"Load" Comparison

<table>
<tr><th colspan="2">Pre-Transformation
Traditional "Teaching Load" System</th><th colspan="2">Post-Transformation
Comprehensive "Faculty Workload" System</th></tr>
<tr><th>Fall</th><th>Spring</th><th>Fall</th><th>Spring</th></tr>
<tr><td>Course 1 = 3 FWH</td><td>Course 1 = 3 FWH</td><td>Course 1 = 3 FWH</td><td>Course 1 = 3 FWH</td></tr>
<tr><td>Course 2 = 3 FWH</td><td>Course 2 = 3 FWH</td><td>Course 2 = 3 FWH</td><td>Course 2 = 3 FWH</td></tr>
<tr><td>Course 3 = 3 FWH</td><td>Course 3 = 3 FWH</td><td>Course 3 = 3 FWH</td><td>Course 3 = 3 FWH</td></tr>
<tr><td>Course 4 = 3 FWH</td><td>Course 4 = 3 FWH</td><td colspan="2">Subtotal for Course Load = 18 FWH</td></tr>
<tr><td colspan="2">Total Teaching Load = 24 FWH</td><td>Scholarship (or alternate assignment) = 3 FWH</td><td>Course design and advising/mentoring = 3 FWH</td></tr>
<tr><td colspan="2">Scholarship</td><td colspan="2">Total Workload = 24 FWH</td></tr>
<tr><td colspan="2">Advising/Mentoring</td><td colspan="2">Typical Service</td></tr>
<tr><td colspan="2">Typical Service</td><td colspan="2">Self-selected overload (paid)</td></tr>
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Aligning Workload and T&P

Aligning Workload and T&P

Recognizing and Rewarding the Faculty Role

TCNJ has adopted a ***teacher-scholar culture***, where URSCA is integrated in our faculty workload model and in our Tenure & Promotion documents/policies.

- **Mentoring/teaching component** – Transparent and equitable system for recognizing student mentoring in classroom-based pedagogies and in traditionally 'outside of load' high-impact pedagogies (e.g., research, internship, practicum, studio, etc.) within our workload model.
- **Scholarship component** – Scholarship is included 'in-load' in our workload model ***and*** our department/program-based "***Disciplinary Standards for Scholarship***" include language about student engagement and outcomes in T&P documents.

T&P Document

Teaching, example language characterizing high-caliber, effective teaching

- "incorporation of ***one's scholarship into teaching***, when appropriate, including the effective ***supervision of student research*** and the incorporation of students into one's scholarship, when appropriate;"
- "commitment to ***all levels of the curriculum***, including First Seminars, liberal learning, introductory courses …"
- "attention to ***student learning outcomes*** that help develop students as successful…"
- "purposeful ***experimentation with one's pedagogy*** in ways that foster engaging educational environments that are characterized by …"
- "creation and/or ***revision of courses and curricula*** in ways …. built around a shared ***commitment to scholarly inquiry***"

T&P Document

Scholarly/Creative/Professional Activity, example language

- "We recognize ***a range of scholarly modes*** including the Scholarship of: Discovery, Integration, Application, Pedagogy, Artistic Expression"
- "We value scholarship that ***crosses departmental boundaries*** and that integrates a variety of approaches, theories, methodologies, and practices."
- "We value scholarship that… ***involve TCNJ students*** in a scholarly manner or are connected to our role in the larger community."
- "The standards that mark excellence in scholarly/creative/professional activity may ***differ significantly among disciplines*** and even sub-disciplines. It is not possible to define in this document what these standards are in every discipline; instead, the accepted *Disciplinary Standards* of the appropriate department(s) and program(s)"

T&P Document

Disciplinary Standards for Scholarship – Guiding Principles

- Alignment with Key Institutional Documents and Values
- Categories of Acceptable Scholarly/Professional/Creative Work
- Criteria to Evaluate Different Types of Scholarly/Professional/ Creative Work
- **Scope, Quality, Importance, and Coherence of Scholarly/Professional/Creative Program**
  - Indication of the value of student involvement in, or the contribution to, scholarly/professional/creative work
- **Authorship**
  - Clear identification of the role played by and value of student engagement in the scholarly/professional/creative work

Transformational Impact

Institutionalizing URSCA at TCNJ

Structural & Cultural Changes

- Began by **defining the learning environment** we desired.
  - Framed our conversations around the respective roles of students and faculty members needed to achieve our desired learning environment.
  - Defined guiding principles.
  - Defined and revised our curricula (liberal learning and departmental).
  - Shifted to a teacher-scholar faculty model and culture.
  - Shifted from a “teaching load” system to a holistic “workload” system.
  - Revised our T&P documents and processes to recognize and reward what is important and align these with our values.

Sustained Institutional Impact

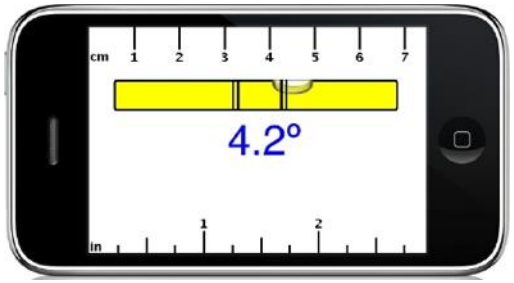
Selected Outcomes

- Increased student recruitment, retention, graduation, and placement rates.
  - Overall and for underrepresented students.
- Increased student learning.
  - Internal & external measures; doctoral completion rates.
- Strengthened the intellectual environment / climate.
- Strengthened faculty recruitment and retention.
- Increased faculty proposal submission and funding rates.
- Increased philanthropic support.

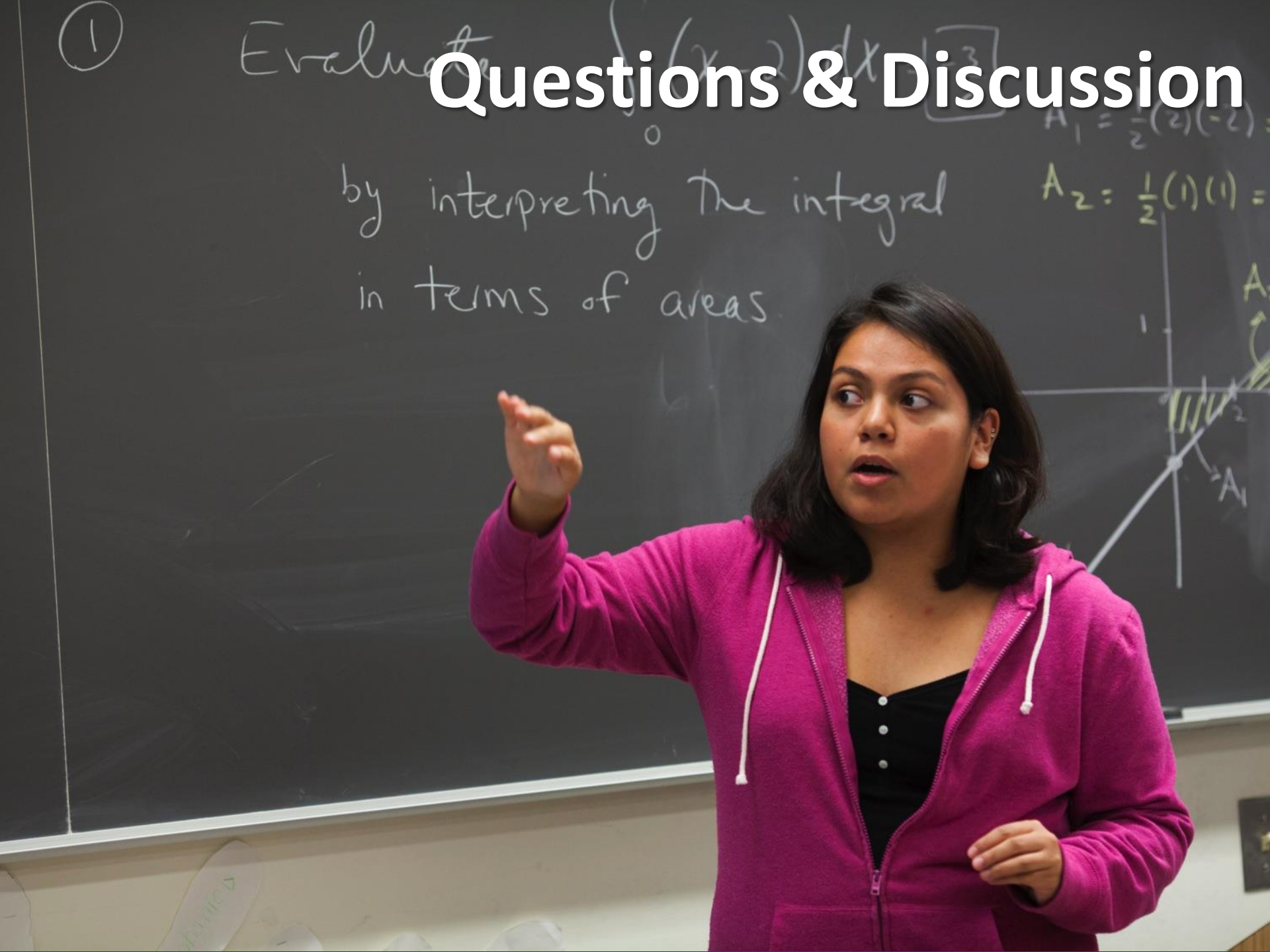
Institutional Culture

Alignment

- It's critical to align:
  - Mission
  - Student Role and Expectations
  - Curriculum
  - Faculty Role and Expectations
  - Faculty Workload and Rewards



Questions & Discussion



QUESTIONS & DISCUSSION

To Cite this Work

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