

Student Association Working Group on Innovation in Undergraduate Teaching (IUT WG)
Final Report
February 17th, 2014

Charge: The IUT WG was charged by the Student Association (SA) Senate to develop, communicate and issue recommendations on emerging topics falling under the umbrella of innovation in undergraduate teaching, including teaching excellence, the use of technology to enhance the undergraduate experience, and the external use of digital education including ‘massive open online courses’ (MOOCs).

Committee Membership: Ravi Sheth (Chair, SA EVP), Yuan Chang, Hannah Chen, Michael Donatti (Duncan Senator), Fran Iyer (Undergraduate Representative, University Committee on Teaching), Sawyer Knight, Josh Lipschultz, Mason Sanders (McMurtry President), Rachel Sterling (Martel Senator). *Ex-officio:* Dr. Josh Eyler (Director, Center for Teaching Excellence), Dr. Matt Taylor (Associate Vice Provost).

Process: The IUT WG was convened in September 2013, and met weekly with various key administrators, faculty members and students during the Fall 2013 semester. In addition, the group carried out a comprehensive student survey receiving ~600 responses (15% of undergraduate body) over the 2013 winter break and presented findings and collected student feedback at the SA Senate during January 2014.

Overview: This final report encompasses guiding principles determined by the undergraduate body on the topic of innovation in undergraduate teaching, as well as specific findings and recommendations. Included in Appendix A (accessible at sa.rice.edu/reports) are in-depth results from the survey the IUT WG conducted.

Guiding Principles: First and foremost, the undergraduate body strongly emphasizes the Senate Working Group on Online Education's (SWG) guiding principle that efforts towards online education (and in teaching innovation) should primarily "*enhance students' on-campus experience at Rice,*" in-line with the Rice mission to be an institution with "*with a distinctive commitment to undergraduate education.*" Specifically, the IUT WG and undergraduate body propose the following guiding principles:

- **Teaching excellence:**
 - Teaching excellence and quality is a core component of the undergraduate experience at Rice
 - Students primarily seek teachers who can present material effectively (85% of students ranked this as one of top three qualities), but who are also approachable and show genuine concern for students
 - Students cite that the primary reason they come to Rice is overwhelmingly for "personal development opportunities". Our teaching mission must encompass and expand beyond coursework to a wide range of personal development opportunities.
 - Feedback is essential in validating and improving teaching quality and new course structures
- **Internal use of digital education:**
 - Developing and implementing digital education tools, in the correct manner, could greatly enhance teaching at Rice; however, each subject area, course, student and professor stands to benefit differently from these tools
 - Classes delivered online and new technologies must match the same rigor as conventional courses
 - Students place value in relationships with their professors and other students, thus all classes (online or not) must provide ample opportunity for in-person interaction; students must continue to spend a majority of their time on campus to receive a Rice degree
 - Students and professors must retain the right to choose their preferred course structure; no class should be offered only online
- **External use of digital education**
 - Rice should do everything within its power to ensure it remains a world leader in educational innovation
 - The undergraduate experience and on-campus teaching (rather than other factors, such as revenue generation) must remain the primary motivation in any current or future foray into this space

Recommendations: Based on these guiding principles, the IUT and undergraduate body make the following four recommendations:

Recommendation 1: *Increase emphasis on on-campus teaching innovation and quality*

- The importance of teaching quality must be tangibly reflected in the administrative structures of the university; processes (especially those that dictate tenure, promotion, and salary) should motivate and incentivize quality teaching to a greater extent.
- Students seek personal development opportunities; the university should expand its teaching mission, curriculum and investment to encompass personalized development opportunities such as experiential learning and research.
- The University has the responsibility to provide professors with the resources to implement innovative technologies and teaching strategies in their classroom. Established initiatives such as the Brown Teaching Grants are an important step in promoting a culture of innovative teaching, but increased support, resources and incentives must be made available to professors through traditional and non-traditional avenues. We also recommend the implementation of grants or awards that reward quality teaching and successful use of innovative technologies.

Recommendation 2: *Strengthen teaching quality and curriculum for introductory courses*

- 81% of students report utilizing external content as an essential component of their courses; we found that a substantial number of students (15%), primarily in introductory level science and engineering courses, are reacting to unsatisfactory course quality by creating their own “online” class experience by using other universities’ online resources as their primary lecture source and only attending Rice classes for assessments.
- These statistics are cause for great concern, and we predict they will continue to worsen if changes are not made; the administration and professors must change teaching quality and curriculum expectations to ensure that all introductory courses are delivering engaging and meaningful content representative of the Rice institution.

Recommendation 3: *Improve feedback on new course structures*

- Feedback is an important component of effective teaching; 90% of the undergraduate body would like to see more accessible feedback mechanisms and technologies *during* the semester, in addition to the end-of-course evaluations.
- A mechanism to collect course and professor evaluations upon a course drop should be implemented.
- Our survey and review of new/digital course structures at Rice shows that while some courses and technologies may be widely lauded, others are ineffective (Appendix A, p. 26). The implementation of these new course structures must be coupled with vetting and feedback systems beyond normal course evaluations that incentivize and encourage professors to make adjustments to maintain Rice’s academic rigor and reputation.

Recommendation 4: *Involve undergraduates in current and future processes*

- Topics in this arena raise controversial questions; for example, student body was split on the issue of supporting MOOCs at Rice, with 65% in favor and 35% against.
- Therefore, the undergraduate body must be involved in any discussion pertaining to teaching excellence, internal digital education, or external digital education; there must be at least one undergraduate representative on any University Committee or Working Group (current or proposed).