

Strengthening Our Programs: Teaching and Learning for Rice's New Century

Introduction

Rice University is poised to start its second century as a leading research and educational institution; recognizing and preparing for this milestone, we are called to reflect on our mission and goals. In the December 2007, “A Vision for Rice University” focused on the undergraduate experience as well as graduate and post-doctoral education as two of the ten steps in furthering the university’s mission. Indeed, most of the other steps relate back the strength and durability of our central educational commitment.

Success in the 21st century learning environment “requires reevaluation, evolution, and change if we are to maintain the level of excellence and achievement for which we are known.”

*David Leebron,
Rice University President*

Both the Vision and the Committee on the Rice Undergraduate Programs report set general university goals. Now programs must craft a strategy for moving forward. How does each program contribute to overall progress towards these goals? Where can the curriculum be improved? What engaging opportunities might be developed to enhance the undergraduate educational experience? How can we enrich the graduate experience?

Revisiting the building blocks of our programs—from primary course learning goals to program learning goals to a program philosophy—is a direct and organized method of finding strengths, needs, and opportunities for development. Identifying who we are and what we do helps us communicate the unique opportunities Rice offers.

In his 2007 “Call to Conversation,” President Leebron asked, “Are we offering...the kind of intense, transformative intellectual experiences that characterize the best undergraduate education?” To answer this question successfully, faculty must understand their program’s philosophy and goals. The best programs are cohesive—content and methods build purposefully, guiding students through foundation courses and into the increasingly complex thinking required at upper levels.

These are the goals for the Strengthening Our Programs approach:

- To reflect on current practices,
- To provide a system for curriculum review,

- To identify programmatic strengths and needs,
- To meet institutional goals for improved education.

A System for Strengthening Our Programs

To achieve the goals outlined above in a timely and organized way, a systematic approach begins at the course level and is iterative at each step (or “cycle”).

Cycle 1: Course Learning Goals—What should my students be able to do after finishing my course? Faculty identify the primary learning goals for their courses. These goals can help structure and organize assignments. You can share these goals with students to help them understand course sequencing and make wiser scheduling choices. Reflection, discussion, and review play a key part in refining individual instructor expectations, especially in multi-section courses.

Cycle 2: Program Learning Goals—What does a graduate from this program “look like”? What skills and qualifications does the program emphasize? Identifying program goals can happen in different ways—working inductively from course objectives delivered through cycle 1 to find commonalities, starting with standards in the field, or comparing local goals with programs in peer institutions. The chairs, the program as a whole, or a representative committee may complete the drafting in this cycle.

Cycle 3: Course-Program Maps—Now we know the course and program learning goals. How do these align? Mapping the courses and program help identify strengths and areas for improvement in sequencing, as well as opportunities for course development. Linking this map to CRUP goals then affirms commitment to university vision at the undergraduate level.

Cycle 4: Methods Reflection—We know what we want to teach, but how does the learning occur? Faculty list and reflect upon their teaching methods. This cycle offers opportunity for reflection, sharing, and coordination. Support units, such as the Center for Technology in Teaching and Learning, the CAIN Project, and the Fondren Library, can help evaluate current practices and brainstorm new ideas.

Cycle 5: Program Philosophy—What common teaching and learning themes or practices do our program identify as effective? A program philosophy doesn’t limit the tools any individual professor may employ; instead, it serves as a guiding shared understanding or identity. What sets you apart? Tier one institutions offer similar programs, but the means by which they structure and deliver the programs is what differentiates an outstanding education.

Cycle 6: Methods-Philosophy Map—How do my own teaching methods align to my program’s guiding philosophy? In the same way that mapping course and program outcomes reveals

areas of strength and opportunity, getting a bird's-eye view of what a student experiences in terms of classroom approaches can do the same. This is also an excellent opportunity to gather insights from cycles one through five and reflect on program needs. Connecting practices to CRUP goals closes the loop back to Rice's undergraduate goals.

Cycle 7: Formal Assessment Plans—What evidence do we have of progress toward our goals? After completing cycles one through six, programs are poised to start a new phase of inquiry and reflection—a formal testing of specific course and/or program outcomes. Beyond satisfying requirements for institutional accreditation, formal assessment plans provide a persistent means for gathering data as well as feedback about the program, useful information when planning for growth, changes, and enhancements.

Outcomes and Benefits

Because these cycles concentrate on reflecting and refining, the products—goals, maps, needs, and plans—are never “final.” Such practices create a systematic way of talking about who we are and what we do, allowing for more effective communication internally and externally. Other benefits include...

- Active communication among faculty and programs concerning goals and methods.
- Overview maps to see programs from a manageable perspective.
- Information useful for describing program features and benefits in marketing materials and on web sites.
- Data for informed decision making, such as program creation, expansion, change.
- Clear connections to university-level vision and goals.

Support for Faculty and Programs

The time and approach for working through the seven cycles will vary by program, and organized materials as well as support structures will be in place. The Office of Institutional Effectiveness will provide...

- Workshop modules and a facilitator for each cycle.
- Student surveys from which to gather feedback about teaching methods (cycle 4).
- Program review-type materials such as completion rates, etc. (cycles 4-6).

In addition, on-campus units such as those mentioned in Cycle 4 above, may be useful at differing stages of the process.

We must provide a holistic undergraduate experience that equips our students with the knowledge, the skills, and the values to make a distinctive impact in the world.

—A Vision for Rice University