

**A NEEDS ASSESSMENT FOR SUPPORT OF
EXCELLENCE IN TEACHING AND LEARNING AT WPI**
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Colleges that support faculty in the development of their teaching skills recognize the difference between "caring about teaching" and "critically practicing teaching." They are working to create a faculty community of critical practitioners who teach in a reflective and intentional manner that leads to better student learning.

-- Michael Reder, "Does Your College Really Support Teaching and Learning?"¹

Executive Summary

The Center for Educational Development and Assessment (CEDA) is charged with "providing support for the enhancement of teaching and learning at WPI." In practice, CEDA has been a contributor to broader faculty development programming, especially for new faculty. From 1996 through 2004, CEDA was directed by Professor Judith Miller. Following her departure, the position was vacant until July 2006 when I was appointed. My focus for the 2006-07 academic year was to reinvigorate many of the programs and services that had been developed under Miller's leadership. In the spring semester I also undertook a needs assessment to guide planning for the coming years, so that programs and services could be mapped directly to articulated needs.

This document describes the needs assessment methods and limitations along with findings, recommendations, and actions that have already been taken. The primary findings and associated recommendations, explained more thoroughly in the body of the document, can be summarized as follows:

1. *Initiatives to foster development of excellent teaching and innovative teaching are bound by perceptions (some said reality) that teaching improvement efforts and innovation are voluntary and without rewards.* This question of incentives and rewards for teaching, both for promotion from Associate Professor to Professor and for tenure, was one of the strongest themes that emerged from this study, even though participants were not asked about it directly. The best outcome of this needs assessment would be a serious effort on the behalf of faculty governance, department heads, and the administration to examine this perception and take action to address it. Some specific ideas for such an effort are described in the body of this document.
2. *Undervaluation of teaching, or the uncritical examination of teaching, may be tied to limitations in our documentation and evaluation of teaching,* which rely almost solely on student ratings of instruction. Peer review of teaching for summative purposes (i.e., for performance review) would require an enormous investment of faculty time in order for the results to be valid. A more realistic and effective approach might be to work toward a campus-wide expectation for periodic formative evaluation of teaching, in which faculty members can choose from a menu of possibilities that involve critical reflection, goal setting, action planning, and discussion among colleagues teaching similar courses.
3. Participants in this study most commonly identified teaching-learning challenges in the areas of *developing students' skills, behaviors, and attitudes necessary for independent "lifelong learning;" managing the apparent diversity of abilities and/or motivation levels in the typical classroom;* and

¹ *Peer Review*, Vol. 9, No.4 (2007). Reder is the Director of the Faculty Center for Teaching and Learning at Connecticut College.

developing students' higher-order thinking abilities. Outcomes assessment data also indicate that our students engage less frequently in behaviors associated with *active learning or learner-centered paradigms of teaching.* Other outcomes assessment data and internal planning documents indicate curriculum development needs in the areas of *writing, ethics, and diversity/pluralism.* Programs, services, and resources coordinated by CEDA and other units on campus should support these areas.

4. *While there is general satisfaction with services and support for new faculty, some of the Assistant Professors participating in this study identified needs or opportunities for improvement: more proactive mentoring in some departments; integrating extended orientation and teaching and research development activities more closely with the path toward tenure, along with increasing expectations for participation; and more concrete communication about expectations for effective tenure packages.*
5. *Internal small grants and travel to high quality teaching conferences and workshops were most frequently mentioned by Department Heads, Associate Professors, and Professors as a means of providing faculty with time and incentive to focus on teaching or curriculum development.* While technology-focused small grants have been funded by the IT Division for many years, small grants for non-technology initiatives have not been available since the 2004-05 academic year. These findings provide strong support for full reinstatement of the Educational Development Council (EDC) internal grants program.

The table on page 3 presents a “curriculum” for CEDA and recommendations for the broader community that respond to these findings. In the short term and thinking primarily tactically, the only recommendation that requires a budgetary volume increase is full reinstatement of the EDC small grants program, last funded at \$20,000. Thinking more strategically, WPI could move into a position of leadership in teaching excellence and innovation by making more structural changes in faculty roles and rewards, and/or in the nature of the Center for Educational Development & Assessment. One example of the latter would be to enlarge the Center to include a representative from each department and major program to coordinate and leverage education initiatives. Consideration of strategic directions and the appropriate structure for the CEDA is outside the scope of this document but certainly merits discussion.

There is little doubt in my mind that WPI faculty care deeply about teaching and student learning, but I would argue that there is much more we can and ought to do to support and recognize the *critical practice of teaching.* Programs and services offered by CEDA can foster critical practice but the impetus to get there will require broader support from the Faculty through its governance committees, reinforcement from the Administration, sensitivity to faculty workload, and wise use of the varying talents and interests of faculty members.

**A Draft “Curriculum” for the Center for Educational Development & Assessment (CEDA) and
Recommendations to Guide Educational Development and Faculty Development for Excellence in Teaching & Learning**

	PROGRAMS, RESOURCES, AND SERVICES					
	Food for Thought Seminars – Workshops – Invited Speakers	EDC Small Grants Program [1]	Web and Print Resources [2]	Class of '57 Travel Grants [3]	New Faculty Orientation – Mentoring Program	Other
Needs for Instructional Development						
<ul style="list-style-type: none"> Developing students’ lifelong learning attitudes and skills Pedagogies of engagement (active learning, learner-centered teaching) 	✓	PROPOSED FY 09	↑	COMING FALL 2008		CEDA one-on-one consultations; ATC/Library/IT [4]
Needs for Curriculum Development						
<ul style="list-style-type: none"> Writing Across the Curriculum, Writing in the Disciplines Ethics, diversity & pluralism New course development 	✓ (writing) ↑ (others)	PROPOSED FY 09	↑	COMING FALL 2008		CCAC [5]; recommend consideration by Faculty Governance [6]
Needs for Organizational Development & Faculty Career Development						
<ul style="list-style-type: none"> Expectations and incentives/rewards for teaching excellence and innovation 						Recommend consideration by Faculty Governance (COG, COAP, CTAF)
<ul style="list-style-type: none"> Documentation and evaluation of teaching, peer review of teaching 	↑		↑			Recommend consideration by Faculty Governance; current services include consultations and videotaping
<ul style="list-style-type: none"> Early career faculty development 		PROPOSED FY 09	✓	COMING FALL 2008	↑ [7]	ATC/Library/IT [4]; ORA programs; CEDA support for planning the assessment component of grants
<ul style="list-style-type: none"> Post-tenure faculty development 		PROPOSED FY 09		COMING FALL 2008		ATC/IT [4]; CEDA support for assessment evaluation and planning [8]; recommend examination of sabbatical program.

- [1] The small grants program administered by the Educational Development Council (EDC) was last funded in FY05 at \$20,000, after which time the program was put on hold because of the absence of a Director of the CEDA. Request for reinstatement was not successful in FY08. Tentative approval has been given for FY09, but only at \$10,000. (See Section 4 of document for more discussion.) The *Call for Proposals* could encourage attention to the areas of instructional development and curriculum development identified in this needs assessment.
- [2] Increase awareness of CEDA print library using a web listing. Improvements to the CEDA website began in Summer 2007 in the areas of teaching feedback and evaluation and teaching tips.
- [3] As a result of this needs assessment, funding for Teaching Development Travel Grants has been secured from the Class of '57 Excellence in Teaching Fund.
- [4] Instructional Technology Specialists in the Academic Technology Center (ATC), the on-line Teaching Technology Collaboratory, and reference librarians in Gordon Library also provide support in these areas. The IT Division funds Course Redesign Technology Grants, the successor of Teaching Technology Fellowships, which are co-administered by the ATC and the EDC.
- [5] Beginning in 2008-09, there will be a full-time Director of the Center for Communication Across the Curriculum, which will strengthen our ability to support excellence in teaching and learning in First Year Project Experiences, IQPs and MQPs, and writing-intensive courses in the majors.
- [6] UOAC and the CAP Subcommittee on the First Year and General Education have identified ethics, diversity & pluralism as gaps in our curriculum but action has not yet been taken to fill them.
- [7] Continue work on an extended New Faculty Orientation program, stronger mentoring, supporting development of effective tenure and promotion materials.
- [8] The needs assessment revealed desire for more mentoring and support related to studying and evaluating educational innovations at a high level of quality for the purposes of publication and proposal writing.