

Charge to the First Year Task Force

Following consultation with the Committee on Governance, I am forming a Task Force on First Year Learning Outcomes to investigate concerns about the quality of our first year learning experience for WPI students, and to report with recommendations for improvements by the end of this academic year. Their charge is as follows:

CHARGE:

In light of WPI's Strategic Plan objective to create an "honors college" experience for all students, review the effectiveness of student learning in the first year using (among other sources) existing evidence--including the 2000 and 2001 National Surveys of Student Engagement--that suggests that WPI falls short in the first year of providing an "honors college" experience. Pay special attention to the draft First Year Learning Outcomes (appended to the end of this memo) proposed last year by the Student Outcomes Assessment Steering Committee, in terms of how well these outcomes address our concerns about the first year. By the end of the 2002-03 academic year, submit a report making recommendations to faculty governance and the administration for improving the WPI first year learning experience.

CONCERNS:

Our current Strategic Plan adopted as its first objective "Fully develop the WPI Plan for all students around an 'honors college' metaphor at all levels." WPI has made significant progress in the first year in some areas, most notably in the adoption of the "Insight" extended orientation and advising model for the whole first year class in 2001, and in the "PLC (Project-based Learning Community) experiment for selected in-coming students (expanded to two sections for fall 2002).

However, evidence is mounting that the overall academic experience for WPI students in this first year falls far short of an "honors college" experience.

First, consider the COG summary of the faculty responses to President

Parrish's third White Paper, reproduced below:

General level of interest in the first year was high. BB, CEE, CM, ESG, and MA were broadly supportive of an improved first year experience; The Educational Studies Group (ESG) identified it as the top priority among WP3 foci. Nine others commented on at least some aspect of the first year. BB, HU&A, ESG, and MA mentioned the need for a campus-wide approach to first year improvement.

A recurring theme was the desirability of non-traditional academic experiences early in the undergraduate experience. In particular, BB and HU&A specifically recommended interdisciplinary first year seminars. In addition, BB supported expansion of the tutorial program, and suggested that first year students need a shared experience. CAP supported the Insight program specifically. CM felt that first year students need more information about various disciplines and emerging technologies to assist them in major selection.

Second, the spring 2001 administration of the NSSE (National Survey of Student Engagement) disclosed that in several key areas, WPI first year students reported lower levels of academic engagement than students from our AITU comparison group (Harvey Mudd, Rose Hulman, IIT, Clarkson, Polytechnic University, Kettering, and Embry-Riddle). Areas where WPI first year students reported statistically significantly less engagement are marked with an asterisk.

*asking questions in class.
*making class presentations.
*writing complex papers requiring the integration of data or information from various sources.
*working with students on projects during class.
discussing ideas with a faculty member outside of class.
analyzing and synthesizing ideas or information.
* making judgments about the value of information, arguments or methods.
applying theories to practical situations.
*writing and speaking effectively.

Finally, NSSE argues that student time usage is the biggest indicator

of academic engagement. The response of WPI first-year students to the two questions below indicated somewhat less engagement than shown by first year students at the comparison engineering schools (though here the difference was not flagged as statistically significant).

preparing for class
working harder than you thought you could to
meet an instructor's standards or expectations.

(Full data for the NSSE survey are available on myWPI.)

MEMBERSHIP:

The membership of the Task Force on First Year Learning Outcomes is as follows:

Faculty

William W. Farr
Hossein Hakim
Peter H. Hansen
Arthur Heinricher
Thomas H. Keil
Paul P. Mathisen
Judith E. Miller
Lance Schachterle
Stephen J. Weininger

Staff

Ann Garvin
Natalie A. Mello
Janet B. Richardson

Undergraduate Students

To be named

I am particularly pleased that Peter Hansen, the chair of CAP, and Hossein Hakim, the chair of CASL, have both expressed support for this project and have agreed to serve on the Task Force as a means of insuring interaction with faculty governance. Assistant Provost Schachterle will chair the Task Force. This collegial approach to study our first year learning outcomes, while recognizing faculty supervision of the academic program, will enable WPI to move forward on this important issue in a timely manner.

DRAFT FIRST YEAR OUTCOMES
(Developed by SOASC, Spring 2002):

By the end of the first year, WPI students

1. have made an informed decision regarding a major field of study;
2. have mastered fundamental concepts sufficiently to begin study in the chosen major;
3. have begun to recognize connections between mathematics, science, and humanistic studies;
4. are developing problem solving skills and an ability to work on open-ended projects;
5. have developed strategic learning skills and begun to assume responsibility for their own learning;
6. have learned to use modern computational and technological tools;
7. are developing oral and written communication skills appropriate for the discipline and the audience;
8. have established meaningful social and academic connections with the WPI community;
9. have begun to develop an awareness of personal, societal, and professional standards of ethical behavior;
10. are learning to work productively on teams and with individuals from varied backgrounds;
11. have learned to value academic achievement and intellectual growth.