

An old saying around universities that “no good deed goes unpunished”...

After chairing a task force to explore the possibility of a new program in Science, Technology, and Public Policy last year, the President and Provost has asked me to lead an effort in implementation the recommendations of our committee.

Since the Ford School will have the opportunity to play the lead role in such a program, if, of course your faculty approves, your Dean suggested that I brief you on activities to date.

Last year Provost Courant and VP Ulaby formed the STPP Task Force and charged it with addressing two issues:

1. Should the University have a formal academic program in STPP. If so, why? If not, why not?
2. If the answer is in the affirmative
 - a. What should Michigan’s focus be in this arena?
 - b. Should this be a formal degree program?
 - c. What academic units should be involved?

Here it should be noted that there are two “flavors” of such programs around the country:

1. The application of scientific and technological knowledge to improve decision making across a broad array of public sector domains (“science for policy”)
2. The shaping of government policies to ensure continuing progress in science and technology (“policy for science”).

(As one of the world’s leading research universities, Michigan has a great deal to contribute in both areas. Indeed, its faculty members, as individuals, are already quite involved in “S&T for policy” and “policy for S&T”)

NOTE: There is a third possible area, referred to as “science, technology, and society” (STS) which concerns the study of science and technological issues by historians, sociologists, humanists, as well as interested members of the scientific community. Since the UM already has a program in this area, and our concern was more on the overlay between science, engineering, and the social sciences, we did not include this in our study.)

The rationale for such programs generally can be captured by the following considerations:

1. The mission of the university to educate an informed citizenry
2. The interest on the part of students in the interface between science and public policy.
3. Possible careers in the areas of policy development where S&T issues are important.
4. Importance of policy issues to practicing scientists and engineers.
5. Interest of faculty members in teaching and research in STPP areas
6. The possibility that such a program might enhance the University’s impact on state, national, and international policies.

To assess this, the STPP Task:

1. Examined a number of the leading such programs across the nation (Harvard, UC-Berkeley, Carnegie Mellon, Princeton, etc.)
2. Used the Wiesner Lecture Series to bring leaders in STPP to Michigan
 - Neal Lane
 - Lewis Branscomb
 - Jack Gibbons
 - Frank von Hippel
 and also
 - John Holdren
 - David Baltimore
 - Vern Ehlers
 - Dick Malow
3. Discussed possibilities with key faculty and administrators (deans, VPS, etc.)

Recommendation:

The University begin a phased approach to launching instruction and research activities in both areas: “science for policy” and “policy for science”

- by developing instructional programs to provide disciplinary scientists with a better understanding of the policy context into which S&T fit, and
- to provide social scientists with a better understanding of the relevance of S&T to their work.

We believe that a cross-disciplinary curriculum in STPP issues should augment solid, discipline-based degree programs rather than through specific STPP programs (e.g., PhDs in sciences or MPP)

Goals:

1. To provide students and faculty members across a broad range of academic and professional disciplines educational and research opportunities aimed at developing the knowledge and skills necessary to contribute to STPP issues.
2. To establish the UM as an intellectual center for research, teaching, and service at the interface of STPP.
3. To coordinate and facilitate the ongoing involvement of UM faculty and staff members in shaping S&T-dependent public policy and enhance the University’s contributions in these areas.

Phase I:

1. Form a S&T Policy Advisory Committee to VPR
2. Develop an Ongoing Database on Faculty STPP activities
3. Use Wiesner Lecture Series as a device to raise visibility of STPP issues
4. Development of graduate courses in STPP

5. Development of UG courses in STPP
6. Development of proposals seeking external support for startup efforts

Phase II:

1. Develop multicourse STPP sequences that could augment traditional graduate programs for M.S., Ph.D., and professional degrees.
2. Explore the possibility of STPP programs for practicing professionals
3. Develop Internship programs
4. Stimulate and support faculty interest in seeking sponsored research for major centers in STPP areas.

NOTE: In this second phase, we see the addition of new faculty, both at the junior and senior level.

(IN FACT, I AGREED TO HELP START UP THIS PROGRAM AND THEN PASS THE REIGNS ON TO SENIOR SCHOLAR WITH DIRECT INTERESTS IN STPP)

Logisitics:

1. Form a Planning and Implementation Committee (yours truly)
2. Canvas faculty interest in course development (and a core group of faculty)
3. Work closely with faculties of relevant schools and colleges, with the Ford School playing the lead role as the home base of the program.

We believe that this phased approach provides a cost-effective and timely strategy that not only responds to the very considerable opportunities for the University to build world-class programs in the STPP area, but does so within the very real financial constraints likely to be faced by the University for the foreseeable future.

JJD BACKGROUND:

University Professor of Science and Engineering
 (already technically have an appointment in your school)
 Past member (12 years) and chair (3 years) of National Science Board
 Member (6 years) of COSEPUP, the policy board for the National Academies
 Member of numerous federal and academy policy bodies
 NERAC
 NAE Executive Council
 GUIRR Roundtable
 ITFRU

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 Caution: I am involved in "policy for science" rather than "science for policy",
 however...