

Department of Social Sciences

Strategic Plan

April 2010

The Department of Social Sciences has transformed itself from a service unit into a more comprehensive teaching and research enterprise, aligned well with the University's strategic plans. Plans for continued development will focus efforts on expanding our role in graduate education and continuing to balance our contributions to campus-wide general education with our focus on our own majors.

Goal 1: Attract and support a world-class and diverse faculty, staff, and student population.

The faculty and staff of Social Sciences have made this goal part of every programmatic development effort undertaken here, as well as in every academic hire. The Department has a good gender balance; 9 of 21 (43%) faculty members, are female. Three of our female colleagues were hired in the last two years, and we are working hard to provide mentoring and other support to assure their success. (Appendix 1 details faculty demographics and Appendix 2 documents the results of recent hiring efforts. Appendix 5 contains the department's mentoring program.)

The number of Social Sciences majors has grown over the past decade, reaching over 100 when graduate students are included, up from about 25 majors in 1997. This expansion is grounded in quality, with distinctive graduate programs and appropriate undergraduate offerings. The department proposes to increase slightly the number of undergraduate majors to 80, continuing the pattern of growth over the past decade. Graduate enrollment is also planned to increase for reasons noted below, to approximately 30, with the additional students all coming at the Ph.D. level. Appendices 6 and 7 track the number of students and degrees awarded, and Appendix 8 shows the projected enrollment.

The growth of the Department's undergraduate programs is important for more than the number of students they attract. These programs make a major contribution to diversifying the degree offerings on campus. Key steps included the addition of programs in anthropology, secondary education and pre-law to the original two offerings (general social sciences and history). In 2005-06, we renamed pre-law as Law and Society and added new courses by utilizing the expertise of Susanna Peters. This program is modestly thriving, thanks to her efforts. The new degree program in anthropology is a major addition, aligning graduate and undergraduate teaching via a strong faculty group. We continue to see the anthropology major as an attraction to a more diverse array of students, and will work to realize this program's potential.

Only the Department's graduate programs realistically recruit on a national or international level; at this time, all undergraduate degrees in Social Sciences appeal to local and regional audiences. Recognizing that reality, we are striving to attract a more diverse pool of students. Already, nearly half of the department's are female, but there is more to do to address the under-representation of minority students. We have begun a new initiative, together with colleagues in Humanities, Biological Sciences, and Multicultural Programs, to recruit and retain Native American students from the Upper Great Lakes region. We will accomplish this through a two-pronged approach; making contacts with regional secondary schools that have significant Native populations, and recruiting directly from Keweenaw Bay Ojibwe Community College. Appendix 3 shows the demographics of the department students and Appendix 5 contains the department's plans for diversifying the population of students.

In addition, we continue to take full advantage of the Visiting Women Lecturers program, identifying strong female role models for our graduate and undergraduate students and inviting them to campus for lectures and mentoring opportunities. This has proven to be very effective in both connecting our students to outside professionals and for presenting cutting edge scholarship produced by women.

1.3 Provide exceptional infrastructure...

The department is in desperate need of additional space for faculty offices, graduate student offices, an undergraduate lounge, and seminar rooms. Access to the AOB Annex has been central to the growth of the Industrial Archeology and Industrial Heritage graduate programs, but once again, the department is at the point where it cannot add any additional people without securing more and better space. We have reached, and perhaps exceeded, the space capacities of these two structures. The planned move of the Department of Cognitive and Learning Sciences Department will help, but cannot provide sufficient space for the needs of both units housed in the AOB (SS and the School of Business and Economics). This is a pressing problem that could be aided by making the Annex safely and fully functional.

Goal 2: Deliver a distinctive and rigorous discovery-based learning experience grounded in science, engineering, technology, sustainability, and the business of innovation and an understanding of the social and cultural contexts of our contemporary world..

Social Sciences contributes to achieving this goal in a couple of ways. For majors, faculty insure that students realize that they are accessible and open to a variety of mentoring efforts. “Discovery-based learning” in the social sciences means, most basically, giving students a chance to see what the fields are about. The best way for this to happen is via independent study projects and REU type experiences. Faculty here have engaged several SURF projects during summer semesters, involving students in a pattern of working directly on faculty research projects. We have added a project course for juniors and seniors as well, and are strongly encouraging majors to take advantage of year-abroad and internship programs. Perhaps the best fit between this goal and our undergraduate programs, however, is with the Anthropology degree, for which the summer archaeology field school serves as the capstone experience for all majors. That same experience is also crucial for the MS students in Industrial Archaeology, a core requirement of the program.

The graduate program in Environmental Policy contributes to campus efforts on sustainability, as a partner in the recent IGERT , and through research projects pursued collaboratively with faculty in several departments. Moreover, the required project course for all EP MS students always deals with a real-world problem and entails substantial hands-on experience in public participation in environmental problems. Faculty from the program also play a large role in developing campus energy and sustainability plans, together with students. In sum, we’ve been doing discovery-based learning for some time.

The department also contributes significantly to the education of students into the social and cultural contexts of the modern world they are about to enter and hopefully to lead. The contribution of SS faculty to general education is an essential mission, most notably in the form of UN 1002 (World Cultures) and UN 2002 (Institutions). But almost every 3000-level course offered by the department

also serves as an elective for distribution requirements.

This situation contributes to a basic challenge facing the department and constitutes a primary limiting factor the Department faces in terms of Goal 2. Social Sciences faculty are always juggling multiple commitments – general education, majors, graduate students and research. Since nearly every upper-division course in the Department combines majors and distribution list students, it is all but impossible to sustain the rigor that would best serve majors alone. The result is that SS majors routinely express frustration about this classroom dynamic. We have withdrawn some SS upper-division classes from the distribution list and installed departmental pre-requisites on distribution list courses that insure only interested students- -mostly majors, participate in certain classes. These actions are part of a continuing evaluation of our curriculum that seeks to address trends that will impact the department in the next few years. Our Curriculum Committee is reviewing several possible changes that should strengthen our offerings for majors while maintaining the rigorous general education options available to the entire campus.

Goal 3: Establish world-class research, scholarship and innovation in science, engineering, and technology that promotes sustainable economic development in Michigan and the nation.

3.1 Improve our stature as a research university and Ph.D. granting institution.

The Social Sciences Department easily contributes to the first part of Goal 3. The Department's reputation in industrial archeology is unmatched in the world. We edit the leading journal in the field and run the headquarters for the Society for Industrial Archeology. Pat Martin is currently the President of the international organization for industrial heritage (TICCIH). Environmental policy faculty are central to a number of projects on campus, including the SFI IGERT, the MUSES project, and individual projects in several engineering departments. Individual faculty are nationally and internationally recognized for their research in mining and Copper Country history (Lankton); engineering education (Reynolds, Seely); environmental economics (Solomon); environmental history and regulation (Gorman); history of transportation, especially highways (Seely).

The key to these efforts has been the niche strategy pursued – namely, identifying activities that grow from social science roots and fit well into the umbrella concept of a technological university. The MS in industrial archaeology is not only unique, but is internationally recognized as the premiere program in this academic niche. The new doctoral program in Industrial Heritage is an important step, but it requires careful nurturing and attention to insure that it can meet its goals. The MS program in environmental policy is moving steadily in the right direction, especially since we have added some faculty expertise in 2009. Members of this group make major contributions to environmental research on campus, working as Co-PIs with several other units. The anticipated addition of a PhD program in environmental and energy policy (approved by the University Senate in spring 2010) will increase our reach and impact in this effort. The environmental policy programs are essential not only to the growth of the department, but also are essential to the long-term viability of the university's work in environmental sustainability. Therefore, an essential step for the department is the implementation of a successful doctoral program in environmental policy. The good fortune of new faculty – five alone in 2008-09 – has brought to the department the people who can support such an endeavor.

The other elements upon which the department's graduate programs will rest is an effort to secure external funding, especially for the support of graduate students. Over the past decade the unit has done especially well in this respect – far more successfully than would normally be associated with graduate programs focusing upon industrial history or environmental policy at the MS level. The key has been project-related studies, often with a substantial component of field research that could be funded by a variety of external sponsors. Continuing down this path is vital to the growth of the programs, and the department will pursue the strategy accepted by all CAS departments of securing additional support of graduate students support. About \$500,000/year in external funding seems to provide a reasonable target, given the recent pattern of external support for the department's programs shown in Appendix 9.

3.2 Promote economic and social development and innovation in Michigan the nation, and the world.

3.3 Address societal needs through global partnerships.

Contribution to the economic development and international aspects of this Goal is harder for Social Sciences to demonstrate in concretely measurable terms. In some respects, our greatest contribution is simply educating MTU graduates who can think, communicate, reason, and understand the world -- especially the place of technology within that world. Many students gain these capacities through our general education instruction. In addition, the environmental policy research conducted here related to land and water usage makes a strong contribution to insuring that development is conducted on sustainable terms.

Our programs have a modest international reach already. The graduate programs both enroll international students, and both have been engaged in international research, on our own accounts and in combination with partners in other departments and universities. We have placed our undergraduate students in Study Abroad opportunities, and we've recently supported a Fulbright Research Scholar from Finland who is preparing a study of the immigrant Finnish experience in the Copper Country. This year we will initiate a faculty-led Study Abroad experience in the United Kingdom, a project that promises to carry on into the future and provide an enriching experience for our students. And we have been encouraged by European colleagues to explore the establishment of an Atlantis International Master's Program in Industrial Archaeology.

All of these elements contain one common thread – Michigan Tech needs to refine its identity as a technological university. Everything this department does fits under such a heading -- we are a specialized social sciences unit with critical focus on the interactions of science, technology and society. MTU not only prepares students to learn how to develop new science and technology, but also must help them understand, communicate, manage, and guide technology into sustainable pathways. This requires giving attention to both the historical development of industry and to the importance of policy studies about science, technology, energy, and the environment.

Planned Activities: Develop Research Center for Industrial Archaeology; Encourage university to seriously present itself as a technological university: Develop Doctorate in Environmental and Energy Policy.