

Report of the Informatics Committee

Indiana University East Faculty Senate

April 29, 2005

The Informatics Committee was formed to make recommendations to the Faculty Senate with regard to the feasibility and practicality of developing and offering Informatics programs on this campus. The committee's instructions were to discuss curricular possibilities without being limited to the Bachelor of Science proposal in Informatics.

The informatics ad hoc committee met three times during spring 2005. The topics of the first meeting were "What is informatics?" and "Who needs it?" In the second meeting, discussion centered around ways of offering informatics short of a degree program. In the third meeting, we tried to reach some conclusions.

During the first meeting the main focus was on creating a degree program in informatics. A good deal of discussion ensued to determine the range of areas which would fall into informatics and what attributes would actually constitute them, since the term "informatics" is not widely understood. As determined from that discussion and drawing from a variety of sources, including a brochure from a recent conference entitled "Informatics: Defining the Research Agenda," (Bloomington, 2004), informatics may be regarded as the study of information technology, the representation and processing of information, including its applications and social ramifications. The scope of the field includes: the semantic web, grid computing, and science applications; cognitive dimensions of informatics; musical informatics; human-computer interaction and design; discovery and application of information; social and cultural dimensions of informatics; logical and mathematical aspects of informatics; political, legal, and economic dimensions of informatics; security and privacy. Informatics includes computer science, but computer science is only one of its sub-fields.

Thus, students graduating with a bachelor's degree in informatics would be competent in the representation and processing of information, able to apply it to another field, and aware of the human impacts of information. At present, the cam-

pus has only one active bachelor's degree which produces graduates with comparable skills: the Bachelor of Science in Business with a concentration in Management Information Systems (MIS), which could fairly be described as "business informatics." A general informatics degree would allow students to concentrate in applying informatics to other fields in addition to business, such as communications, biology, and the social sciences.

The committee wondered about community need and the place of informatics in the curriculum. We reviewed the IU Bloomington informatics program material and questioned whether such a program would be appropriate for us. The committee noted that no needs assessment had been done, and Ange Cooksey volunteered to contact local community leaders to try to determine local support. Alternatives to degree programs were explored. Primarily we discussed the possibility of certificate programs, division specific courses and "informatics across the curriculum". We agreed that informatics would be an important tool for graduates. Much like writing, all college graduates should be able to find, utilize, create, and process information in an electronic environment.

During the second meeting, we discussed ways that informatics could be included "across the curriculum" and whether that would be preferable to certificates or division-specific courses. We considered the current computer courses (A110 and W200) as possible vehicles to include informatics for all students. We also discussed the possibility of various divisions creating their own informatics-based courses. The discussion became a consideration of the campus computer "literacy" requirement and looked at the possibility of replacing several of the topics currently included with informatics topics. Because of lack of funds and lack of sufficient faculty on this campus to teach informatics courses, the possibility of including informatics topics in current courses seemed appropriate. A number of committee members are currently using informatics skills and materials in their classes or research and are well versed in informatics as it pertains to their specific disciplines; none on the committee is broadly trained in informatics.

In the third meeting, the chair conducted a straw poll of the members, asking whether a bachelor's degree program in informatics should be initiated on the campus, and received an even split from the members. Discussions of various models of programs continued. Ange Cooksie reported that the local community leadership seemed ambivalent to the prospect of informatics on this campus. They seemed supportive, but not encouraging.

In sum, the committee reached no conclusions on the question of whether to offer some form of an informatics program, or informatics study in any formal context and did not move in any particular direction. While several models were

discussed, none received majority support. However, at the same time the committee was enthusiastic in thinking that the topics normally thought to be part of informatics are important for graduates and there should be a mechanism to provide that knowledge for our students. The committee felt that additional study is warranted.

The committee is not ready to recommend for or against implementing a bachelor's degree in informatics. Committee members believe that informatics is important and will become even more important in modern society, but are uncertain of the demand and opportunity for informatics in the local economy, and uncertain of the resources available to implement a degree.

We had no opportunity to perform a full-scale needs assessment. Informal contact with the Chamber of Commerce met with a lukewarm reception. Name recognition for "informatics" among employers is low. Although a needs assessment is not required for the Board of Trustees, we think it would be wise to determine the level of need more carefully before developing a full-scale program.

With no financial resources known to be forthcoming from the state of Indiana, there was concern that an informatics degree would drain other degree programs rather than increase enrollment.

Given the limited state of our present knowledge concerning demand and resources, we recommend that the work of the ad hoc committee be continued through the summer and next year.

The members of the Informatics Committee were Ange Cooksie, Margaret Thomas Evans, Mary Folkerth, Mike Foos, Jerome Mahaffee, Sue McFadden, and Greg Weber (chair and liaison to the Curriculum Committee).

Respectfully submitted by Gregory D. Weber