Trip Report

From a Meeting of Universities with Schools/Colleges of Computing/Information Technology

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1. Background

Representatives from Virginia Tech attended a meeting with participants from universities who have or are planning a "school" or "college" that give special focus to "information technology" or "computing." A list of attending universities is attached. The purpose of the meeting was to disseminate information about existing units, share experiences in planning and operating such units, generate awareness of new units being considered, and develop an understanding of the costs and benefits of these units. Participating from Virginia Tech were Dr. Joe Merola (Acting Dean of the Graduate School) and Dr. Dennis Kafura (Head, Department of Computer Science).

The meeting was held on March 22/23, 2001 in Atlanta, Georgia and chaired by Dr. Peter Freeman (Dean, College of Computing, Georgia Tech). The meeting was sponsored by the Computing Research Association (see www.cra.org), an association of Departments of Computer Science, professional computing societies, and research laboratories throughout North America. The current meeting followed an initial gathering held at the Snowbird Conference in July, 2001. The Snowbird Conference is a biannual meeting of representatives from CRA members. Virginia Tech is a member of CRA through the Department of Computer Science.

The participants agreed to hold another meeting on August 12/13, 2001 in Berkeley, California. The details of the meeting will be communicated via an email list maintained by CRA. Virginia Tech receives mailings from this email list through Dr. Dennis Kafura.

2. Summary

While the discussions were broad ranging, the critical information is summarized under four topics:

- the motivation for have a school or college of computing or information technology,
- the mission of the school of college,
- the naming of the school or college, and
- the model of how the school or college is structured.

The intent of this summary is to be inclusive of the ideas that were presented.

Motivation

The motivations for forming a school or college focused on computing or information technology included those listed below. Implicitly, a number of these motivations assume that the school or college is a structure that has the status of a dean (i.e., reports to the Provost or is on a peer level with the leaders of other colleges).

- more effective decision-making: The needs of computing or information technology are presented at a higher level in the university decision-making structure. This exposes the needs and concerns to direct

consideration and funding by the provost as opposed to a "pass through" involving one or more college units. This structure also allows more targeted allocation of resources.

- better coordination: among units concerned with computing and information technology. There is a central organizing entity that replaces the need for coordinated decisions, allocations, and actions by Deans in different colleges.

- increased external visibility: to the prominence of computing and information technology at the institution. The school or college validates the institution's commitment to this area.

- improved development (fund raising): It was widely accepted that the school or college should have a development officer. It was reported that donors were more impressed by the title of "Dean" as this conveys a stature and decision-making authority appealing to donors.

- greater agility: a single integrated unit is able to respond with greater flexibility than what is possible by coordination among several units. This agility is especially important in a rapidly evolving field such as computing and information technology. For example, curricular and programmatic changes may be more easily implemented. Specializations with an overarching PhD program can allow for more rapid response to changing needs.

Mission

A variety of missions were visible. In some cases the focus was on concentrating the expertise of computing and information technology to capture a more comprehensive, integrated, or coordinated instructional capability. In other cases, the emphasis was on providing for more effective interdisciplinary work by erasing boundaries between collaborators. It was recognized that these missions are in competition. Some comments indicated that fostering research relationships was easier than unifying curriculum. A clear vision statement for a proposal school or college is needed. A focus on desired outcomes is important.

Naming

It was discussed whether "information technology" was the "right" name for a school or college. It was recognized that this name reflected the current popularity and widespread name recognition of the term. However, it was also recognized that the breadth and malleability of the term also could create confusion (including, and especially, among parents and students) about the exact focus of the unit. The attached list of attendees illustrates the variety of names in use. Because "information technology" is such a broad term, it is necessary to determine what it means for the institution (see *Mission* above, the need for a clear mission statement) rather than to be overly concerned about the name.

Models

While the details of each university's model varied, two broad classes of approaches were seen that can be described as "hard" schools and "soft" schools. A "hard" school has faculty lines allocated within it. A "soft" school does not have faculty lines but is created as a confederation of units that report to other, and possible different, colleges.

A "hard" school can be formed in several different ways. Among those reflected at the meeting were:

- realignment: existing units are transferred from their current colleges to the new school
- creation: an entirely new unit is created from scratch. New faculty lines are allocated to the school.
- enlargement: an existing unit, typically a department of (or one containing) Computer Science, is expanded in size and mission to create the school.

The approach taken at each university depends greatly on local factors including: the location of departments in colleges, the relative political influence of the colleges and departments, the relative ranking or different departments and colleges, requirements for accreditation, the personalities of key individuals, the commitment of the president or provost to a given outcome.

3. Recommendations

Three specific recommendations are made:

An external group from universities with or near to creating a college or school should be invited to visit Virginia Tech. This group could provide insight and feedback on the planning of organizational structures related to information technology.

Virginia Tech should define a visible and explicit process to develop, evaluate, and select organizational structures related to information technology.

Virginia Tech should be represented at the next meeting of the CRA-sponsored group.

4. Other observations

Two other observations are worthy of note.

First, the Virginia Tech representatives raised the question of funding start-up costs for new faculty. This start-up funding is a problem at Virginia Tech. The attendees expressed little or no difficulty in providing start-up funds for new faculty. They clearly expressed that this was not an issue at their institutions. Virginia Tech needs to have a workable solution to this problem or we will not be able to compete for new faculty in information technology areas.

Several universities reported experimenting with novel forms of faculty appointment. The example of a medical school or a teaching hospital was used to motivate forms of affiliation other than traditional tenure-track appointment. Harvard Medial School has five different sets of titles/ranks for “faculty.” These model might employ modifiers such as “clinical” or “practice”. One university referred to using a “Professor of Practice” title.

5. List of Attendees

See attached.

IT Dean's Meeting
March 22-23, 2001
Atlanta

Tony Martinez
Brigham Young University
Computer Science Department

Jim Morris
Carnegie Mellon University
School of Computer Science

Robert Constable
Cornell
Dean, Computing and Information Science

Bill Asprey
CRA

Jacob Slonim
Dalhousie University

David Fenske
Drexel Universtiy
College of Info. Sci. and Tech.

Kathleen Curnett
Florida State

Barbara Price
Georgia Southern University
School of Information Technology

Jim Foley
Georgia Tech
College of Computing

Peter Freeman
Georgia Tech
College of Computing

Jon Michael Dunn
Indiana
School of Informatics

Rob King
Indiana University
Center for Social Informatics

Joseph Leung
New Jersey Inst. Of Tech.
Dept. of Computer and Info. Sci.

Larry Finkelstein
Northeastern University
College of Computer Science

Susan Merritt-Dean
Pace
School of CS and IS

David Hall
Penn State
School of Info. Sci. and Tech.

Jim Napolitano
Rensselaer Polytechnic Inst.

Wiley McKinzie
Rochester Institute of Tech.
College of Applied Science and Technology

Raymond von Dran
Syracuse University
School of Information Science

Khaled Kamel
United Arab Emirates Univ.

Debra J. Richardson
UC-Irvine
Information and Computer Science

Steve Kang
UC-Santa Cruz
School of Engineering

Leigh Estabrook
Univ. of Illinois

Peter Bloniarz
University of Albany-SUNY

Erol Gelenbe
University of Central Florida
School of EECS

Bobby Schabel
University of Colorado

Bill Decker
University of Iowa

John King
University of Michigan
School of Information

Mirsad Hadzikadic
UNC-Charlotte
School of Information Technology

Toni Carbo
Univ. of Pittsburg
School of Information Sciences

David Feinstein
Univ of South Alabama
School of Computing and IS

Thomas Henerson
University of Utah
School of Computing

Mike Eisenberg
University of Washintgon
I School

Dr. Fouche
University of West Florida
Department of Computer Science

Dennis Kafura
Virginia Tech
Department of Computer Science

Joe Merola
Virginia Tech
Graduate School