Vision 2020

A key to the Computer Science Department's future?

What is it?

✧ A departmental strategic planning and development effort patterned after "Project 2000", Civil Engineering's planning and development campaign of the 1990's

Why Vision 2020?

✧ State support for higher education will continue to decline while some tuition restraints will continue

✧ Class sizes will continue to increase because of insufficient classroom space and funds to acquire additional faculty

✧ Residence halls are full

✧ Infrastructure is deteriorating because of backlogged maintenance

Why?, cont'd

- ✧ Already overloaded faculty will be unable to increase research and thereby obtain advanced laboratory equipment
- ✧ Academic products will continue to change in terms of degree programs, course content, and research projects

Turning Point

◇ Our planning and fundraising initiatives from 2011-2020 will determine whether the Computer Science Department and S&T move in the direction of achieving our mission *"solving the problems of a technological world while ensuring bright students have an even brighter future",* or fall backward

Objective

✧ Enhance the Computer Science Department's academic programs and infrastructure

✧ Meet long range needs of students, employers and citizens

✧ Help S&T achieve its vision of becoming one of the nations top five technological universities

Campus Synergy

♦ Planning documents available to help guide departmental planning

♦ "Missouri S& T Strategic Plan 2011-2015 - Contains campus' overall strategic objectives and progress indicators

♦ "2010 Report of the Blue Sky Task Force" - Identifies technology areas that are: a) currently recognized as critical to national interest, b) have potential for long-term commitment of resources at national and state levels, and c) are within the core competitive capabilities of the University

Joint Effort

- The 2020 planning process must be a joint effort of the department chairman, the faculty and the alumni

Leadership

✧ Effective leadership at both department and alumni levels is necessary in order to succeed

The Vision

♦ Likelihood of success will be directly affected by your ability to create a vision of your department ten or more years into the future that you believe in, and that you can communicate and help others see and believe as well

Faculty's Role

⬧ Craft a plan that is inspirational, transformative, and is linked to the Missouri S&T Strategic Plan and the Blue Sky Report's technology criteria

Alumni Core Group

◇ Provide alumni input to strategic plan

◇ Help communicate the "Vision" to other alumni

◇ Help expand Core Group into Steering Committee

Core Group Members

✧ Well known and respected by faculty, staff, and alumni

✧ Capable of making a leadership gift/pledge to "Vision 2020"

✧ Willing and able to encourage others to do likewise

Development Office

✧ Can help identify potential core group members, donors, and volunteers

✧ Can help develop relationships with these people

✧ Can help inform these individuals of potential opportunities to help your department

✧ However, active involvement of Department Chairman, key faculty and alumni absolutely necessary to achieve broad alumni acceptance and support

Prior to Project 2000

✧ CE Department needed to update it's academic program

✧ Significantly improve it's faculty

✧ Renovate and expand the Butler-Carlton Hall

✧ Replace aged departmental laboratory equipment

How Project 2000 Began

✧ In 1990, two CE alumni asked Department Chairman Dr. Joseph Minor how they could help the Department.

✧ Question caused Dr. Minor and CE faculty to think about what the Department needed to progress

✧ Strategic plan included, a) enhancing the academic program via endowed chairs, professorships, fellowships and scholarships, and b) expansion and renovation of CE facilities

Project 2000, Cont'd

✧ During 1990, core group expands to four members

✧ April 1991, Strategic Plan was presented to and adopted by the Academy of Civil Engineers

✧ April 1991, members of core group announced a challenge (Challenge I) to match $ for $ all cash gifts dedicated to Project 2000 and received between April 1991-April 1993*

✧ September 1993, four new challengers issued a similar two year challenge*

✧ By 1995, $5M had been raised to enhance the academic program

Project 2000, cont'd

◇ April 1995, Planning for facility phase begin

◇ April 1996, Fred and June Kummer issued a $1.25M challenge to match $ for $ all gifts for renovations and additions to Butler Carlton Hall

◇ By 1998, nearly $5M had been raised for the renovations and additions

Project 2000, Cont'd

✧ In June 1997 , Governor Mel Carnahan included $5.5M for renovations and additions of Butler-Carlton Hall in 1998 Capital Budget Request to the General Assembly

✧ In 1998, Governor Carnahan included an additional $11.1M in 1999 Capital Budget Request

✧ April 1999, ground breaking for Butler-Carlton Hall

✧ January 2003, renovations and additions completed

Project 2000 in Retrospect

- In 1990, the CE Department., faculty and alumni, embarked on what became a twelve year odyssey.
- Before fundraising for Academic Program portion of Project 2000 was completed in 1995, Chancellor Martin Jiske, Vice-Chancellor UA Tom Coffman, and Department Chairman Joe Minor had all moved on
- By the time the new facilities were competed in 2003, the department had had two additional Department Chairs and two Interim Chairs

In Retrospect, cont'd

✧ We didn't foresee all the obstacles and roadblocks that were to come.

✧ But, we requested and received assistance from many quarters, including Chancellor Park, the Development Office, the Governor, the Alumni Association, System President Mel George, and many, many others

✧ And, when it was over, we had much of which to be proud

Vision 2020

- Back in 1990, the Academy of Civil Engineers didn't know it couldn't be done, so we did it!
- The question is, what are you going to do?
- I know this, "**Whatever you sincerely believe, ardently desire, and enthusiastically and persistently act upon, must inevitably come to pass**"

Vision 2020

- ♦ Questions?

VISION 2020
WHAT, WHY, HOW?
April 1, 2011

What?

"Vision 2020" is the working name for a departmental strategic planning and development process through which each Missouri S&T department could (a) enhance its academic programs and infrastructure sufficiently to meet the long-range needs of students, employers and citizens, and (b) help Missouri S&T achieve its vision of being recognized as one of the top five technological universities in the nation.

Specific achievements of the "Vision 2020" would include…
- Individual, five- to ten-year departmental strategic plans each linked with the Missouri S&T strategic plan.
- Improved alignment among individual academic units to capitalize on productive and synergistic opportunities.
- Improved working relationship between individual academies and their departments to drive the success of S&T's tactical plan.
- Improved alignment and teamwork among the academies to accomplish key strategic capital needs of S&T (i.e., a focus on more than their individual academic units).

Why?

Engineering technology is changing at an ever-increasing rate. In order for S&T as a whole, and its individual departments to keep pace, much less lead technological change, the university and its individual academic units must be able to identify, evaluate and capitalize on future opportunities. To do so, will require substantial investment in people, equipment and facilities.

During the past decade, S&T's ability to achieve its high quality teaching and research mission has been significantly challenged by the significant growth in both student enrollment (56%) and research expenditures (195%), while the state has reduced funding and imposed tuition restraints. Serious student capacity and teaching quality issues are developing because of the inability to a) replace departed faculty and staff, much less hire additional ones, b) appropriately compensate valued faculty and staff, c) expand and maintain academic facilities, and d) develop alternative degree delivery methods. "Vision 2020" must help to alleviate these stresses.

Additional Points of reference…..

- It is expected that state funding will continue to decrease and some tuition restraints will continue. We must behave more and more like a private institution.

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- Funding from corporations and individual charitable giving will become increasingly difficult to obtain as needs increase. Requests and proposals must be well defined and fundable.
- High school students from Missouri will decrease as a percent of Missouri S&T's student population.
- Class sizes will continue to grow due to budget constraints, but not uniformly.
- Product requirements will continue to change in terms of degree programs, course content, and research projects.
- Many faculty members simply do not have time to take on additional research projects that would be very positive in terms of outside funding for capital infrastructure.
- There exists an opportunity to consolidate competing engineering programs across the University of Missouri System structure.

How?

We must take advantage of what we have learned from past successes and failures and effectively use and build on the great assets we already have in place.

"Vision 2020" is patterned after "Project 2000," the Civil Engineering (CE) Department's highly successful planning and development program of the early 1990's. "Project 2000" began with the development of a strategic plan by the department chairman, the faculty and several alumni, which was subsequently adopted by the Academy of Civil Engineers to promote, support and help bring to fruition. "Project 2000" literally transformed the CE program from a well-regarded, but dated, regional CE program to one of the top 25 CE programs in the nation. Earlier this year, several members of the Academy of Civil Engineers (ACE), the department chair, and the faculty, concluded that it was again time to plan for the future. A Civil, Architectural and Environmental (CArE) Department Faculty Planning Committee has been working on this task since September 2010. The current version of the "Vision 2020" strategic plan will be presented to the membership at the April 2011 academy meeting. The objective is to secure the Academy's adoption of the plan and it's assistance in bringing it to fruition. The purpose of this document is to share the "Vision 2020" concept with other departments in the hope they will adopt similar efforts.

In order to be successful, "Vision 2020" must be a joint effort of department leadership, faculty, staff and alumni. The process begins with the recruitment of a small group of alumni, hereafter referred to as the Core Group, who are individually and collectively dedicated to helping the department prosper.

The role of the Core Group is to work with the Department Chairman to:
1. Assess the potential of implementing "Vision 2020" in your department, and ascertain the potential obstacles and roadblocks to doing so.
2. Promote the concept of "Vision 2020" to department stakeholders, including key faculty, alumni, including academy leaders (if department has an academy), and major benefactors.

3. Recruit additional members and form the "Vision 2020" Steering Committee. <u>Ideally,</u> each member should be (a) well known and respected by faculty, staff and other alumni, (b) capable of making a leadership gift/pledge to "Vision 2020", and (c) willing and able to encourage others to do likewise.
4. Initiate formation of Faculty Planning Committee. The department strategic plan is the centerpiece of "Vision 2020." Committee members should (a) have a broad perspective on education and scholarship, (b) be forward thinking, (c) be able to work well together and with alumni, (d) span age, gender, culture and rank, and (e) be willing and able to actively contribute to developing the vision. Two new campus documents are available to guide departmental planning, the "Missouri S&T Strategic Plan 2011-2015" and the "2010 Report of the Blue Sky Task Force." The former contains the campus' overall strategic objectives and progress indicators. The latter identifies technology areas that are (a) currently recognized as critical to our national interest, (b) have potential for long-term commitment of resources at the national and state levels, and (c) are within the core competitive capabilities of the University.
5. Secure sponsorship of "Vision 2020" by the Academy.
6. Through the Steering Committee and whatever sub-committees may be deemed necessary, coordinate and facilitate activities of the Faculty Planning Committee and Development Officers.

As of April 1, 2011, much planning has been done and many documents have been developed for the CE version of "Vision 2020." Other departments could adapt much of this information and many of the strategies contained therein to accomplish similar objectives. Because the Academy of Civil Engineers successfully provided the driving force behind Project 2000, the academies are believed to be the ideal university organizations to lead similar efforts in most departments that possess academies. Presently, University Development Officers are endeavoring to identify potential leaders in each Academy and the alumni at large to help drive each department's effort.