

WHAT WORKS - A KECK REPORT

AIMING HIGH ON A LOW BUDGET

BACKGROUND

A small Catholic college with big ambitions and a modest endowment hopes to design a science building that reflects its dreams of a nationally renowned undergraduate science program.

Challenges:

- ◆ The projected building cost totals more than half of the college's entire endowment
- ◆ Science division faculty disagree on aspirations for recognition within the national scientific community

Recommendations:

Dream big! But make your case.

- ◆ Develop a distinctive and significant vision for why the new science facility is necessary for the college to become a leader in undergraduate science and math education
- ◆ Create a new signature program
- ◆ Research best practices in pedagogy and curriculum to be implemented in the new facility

Embracing aspirations of recognition in the national science community will mean:

- ◆ Focusing faculty attention much more on discovery-based research
- ◆ Developing a more efficient model for undergraduate research that engages students in faculty research rather than allowing students to choose their own research agenda
- ◆ Adjusting faculty workload through more a streamlined undergraduate research program, reduced teaching loads, and additional support staff. ■

FACULTY ROLES & LOADS

Reflections of consultants about the potential of new spaces for science led to comments on the role of faculty in shaping the program to be housed in those spaces.

They noted the lack of a shared vision, with significant ambiguity concerning what is meant by becoming a national leader in undergraduate research. Consultants suggested that such a vision could only be achieved by increasing the faculty and addressing issues relating to faculty work load— both of which will have impact on facilities planning.

Twelve hours of teaching load each semester is incompatible with high quality research. also, if new faculty members are hired with higher research expectations, or if current faculty members choose to devote more time to research, additional and different types of spaces will be required. Now is the time to make these decisions.

Faculty loads are complicated by the current model allowing individual students to pick and pursue their own research agenda is an enormous time drain for any faculty overseeing more than a couple of projects. Another model would be the formation of small research teams, involved in research connected to a common theme. Such changes should be explored and phased in during the facilities planning process. This will allow for a period of adaptation to a new mode of doing business.