Research Culture: To Enhance University Experience for Sustained Research Growth Phani K. Adapa

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Research Culture is an environment that fosters and enhances graduate student and faculty experience, creates symbiotic and amiable atmosphere to nurture pioneers, scientists and engineers for sustained research development and growth of an Institution. As such, there is no standard formula for a good research culture. Every institution has to realize their potential and build on strengths. A focused and streamlined approach is required to establish novel practical initiatives to build research capacity and intellectual capital. Developing research culture is a slow evolving process. Definition of a good research culture is unclear and seems to be of different construct when viewed from the varying perspectives of academic staff, university management and graduate students. Research, teaching and services are three essential components of an academic institution. An environment that facilitates and increases productivity of individuals to attain strategic goals of an institution may be considered as a good research culture.

Many universities are attempting to do more with less in all areas of research as funding becomes more competitive and tied to key performance indicators and accountability measures (Stehlik 2007). Therefore, it is essential to establish strategies that could guide an institution to establish good research culture, which involves "arraying options through a process of opening up institutional thinking to a range of alternatives and decisions that identify best fit between the institution, its resources, and the environment" (Rowley *et al.* 1997).

Ringle and Updegrove (1998) suggest that in order for a strategic planning for research culture to be successful, key individuals within the community-faculty, senior officers, and others-must understand the importance of an initiative and, to some extent, take ownership of it. This type of understanding and endorsement is best achieved when those individuals play a role in the formulation of the initiative itself, as they might during the planning process (Ringle and Updegrove, 1998). Pfeiffer *et al.* (1985) noted that a consensus-based mission statement can serve an additional, practical purpose in management planning; it can act as a guiding force, or priority standard, for allocating limited resources.

Different institutions have various notions of a research culture. The ultimate goal is to attain and sustain high productivity in research conducted by an institution. The following are common examples gathered from on-line search and journal articles.

- Attract and retain quality candidates (PDF, research engineers, graduate students, etc.)
- More PhD's compared to MSc's
- Focus on quality rather than number of graduate students (which means offering higher incentives to attract good candidates)
- Scholarships and funding to every graduate student so that they could focus on research rather than earning living for their families

- More focus on collaborative research to develop a broader range of skills that will enhance graduate student marketability (Harman, 2004)
- Research Indicators: Publications in peer reviewed and reputed journals; impact factor; presentation in conferences
- Conduct research and provide education that could bridge the gap between the laboratory and the marketplace (Harman, 2004)
- Increase industry-funded scholarships, top-up funding (Harman, 2004)
- Establish faculty and student performance based awards (college awards) (preferably financial incentives)
- Organize yearly research and facilities information session for students (mandatory attendance)
- Faculty and student social gatherings and events
- Strengthen/restructure weaker programs (Goodman, 2004)
- Facilitating proposal development: Helping faculty to avoid common pitfalls (Porter, 2003)
- Form a team of college internal reviewers who will give constructive criticism to applicants
- Keep track of proposal success rate i.e. submissions vs. success rate (productivity)
- Organize proposal development workshops or help sessions for junior faculty

Following paragraphs are taken from journal articles that explain various aspects of enhancing research quality and funding.

Every business, including research administration, has performance issues, but the dilemma of optimum performance is universal. No business enterprise can maintain the *status quo* and improve processes without concerted effort in spearheading innovative change in the pursuit of quality and efficiency (Wagonhurst, 2002).

Dooley (1995) conducted a survey within the College of Education at Texas A&M, for example, found that faculty often do not avail themselves of support services that are readily available through the university grants office. The problem has to do with the attention, focus and receptivity of the grant writer. When an agency makes an award, the official notice comes to the sponsored program office; the institution announces it publicly and expresses congratulations to all. When an agency denies the application, often only the applicant gets the bad news, and that individual is usually not anxious to share it. Nor is the disappointed writer in a receptive mood for helpful advice, at least not right away. Those of us who are supposed to help faculty develop successful proposals are challenged to reach those who need help the most, and to reach them at teachable moments, when coaching and mentoring can have real impact.

Studies by Boyer and Cockriel (1998, 2001) show that younger faculty in particular desire more help in preparing proposals. Workshops that feature the many early career awards offered by federal agencies and private foundation will often attract faculty who are receptive to the advising and coaching roles of the grants specialist. In addition to reviewing the requirements

of specific grant programs, such workshops should also include proposal development guidelines such as those discussed above.

Below is the list of articles that show very promising studies and concepts of increasing research activities leading towards good research culture.

- 1. Facilitating Proposal Development: Helping Faculty Avoid Common Pitfalls (Porter, 2003)
- 2. Helpful Gatekeepers: Positive Management of the Limited Submission Process (Porter, 2005a)
- 3. Designing an Incentive Plan for Researchers (Drnach, 2002)
- 4. Off the Launching Pad: Stimulating Proposal Development by Junior Faculty (Porter, 2004)
- 5. What Do Grant Reviewers Really Want, Anyway? (Porter, 2005b)
- 6. Recommendations for Writing Successful Proposals from the Reviewer's Perspective (Molfese et al., 2002)

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