
Enhancing the Culture of Research in Higher Education Institutions*

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Introduction

Operationally defined, the term “research” refers to scholarly, empirical, creative, critical, and/or expressive activities that expand, clarify, reorganize, and/or create knowledge. Its values are recognized in terms of what it can deliver to policy, teaching, learning, cultural, social and other developments. When these activities evolve into a body of “learned behavior” common to a given group/society which shapes their consciousness, it becomes a “culture”.

No executive orders or issuances could immediately make an HEI (Higher Education Institution) an institution with a well-defined research culture overnight. Research Culture or the Culture of Research grows gradually and becomes a natural integral part of an organization like a University.

Far from being exciting and heroic, research is drab and lonely; however, without it no progress can be envisioned. It is mandatory for elegant survival. The new civilization of the 21st century is characterized by an information revolution and globalization, and the scope and depth of the intellectual assets of a nation such as technology, information, knowledge, and

* Read during the 2nd National Conference on Research in Higher Education held on December 2, 2005 at the Polytechnic University of the Philippines, Sta. Mesa, Manila.

culture are the major determinants of its wealth and strength. To achieve this goal, research plays a very important role.

The Need for Research in a Globalizing World

Evidently, no higher education institution has any choice as to whether it wants to participate in research or not. It is axiomatic: Universities should do research. I agree with Dr. Ordoñez when he said that the phenomenon of increasing multi-dimensional interdependence and the changing interdependent world would have implications to higher education research (Ordoñez, 2004). In his own words,

1. “there is a greater need to undertake university research collaboratively, rather than individually – greater interconnectedness has given everyone the opportunity as well as obligation to seek access to the best related thinking on research issues from other colleagues, institutions, even other countries, whether the issue is administrative or pedagogical.
2. the determination of a university research agenda is becoming more policy maker-driven in that policy makers, administrators, beset by decisions they often have to make on insufficient information or analysis are harnessing academia for assistance.
3. University research must detach itself from single discipline focus, to involve systemic and interdisciplinary perspectives – universities are essential parts of the intellectual ecology of the world, but the world is changing and so they have to redefine their roles. They are no longer the ‘knowledge store’ in town, but the flagship in a mega-mall of information sources and they must take these into account, not on a discipline to discipline basis, but in an integrated way.

4. University research must focus on effectiveness issues rather than efficiency issues – the globalizing increasingly interconnected world the universities are striving to serve, requires no less than fundamental thinking; not just how to do things better, but to do better things. Emphasis should shift from improving existing system to casting about for new systems and paradigms to better met the needs of a radically changed world.”

Research and Higher Education Institutions

Of late, there is a strong pressure for universities to undertake research, including universities that offer soft science programs. This is a legitimate and reasonable expectation from universities. The academe, however, is not noted to immediately respond and react to social pressure. History has it that universities tend to be traditional and conservative.

Studies on the research situation in the Philippines showed that while research is generally accepted as essential, many institutions of higher learning lack a definite or substantial program for research, and that research is often relegated to a residual function dependent upon the extra time, manpower or finances after the needs of instruction have been met. For the last fifty years the tertiary education institutions have focused their attention so much on instruction that they appear definitely weak and lag behind in research; the reason for the **lagging behind** of some institutions from those leading higher education institutions in the country in terms of research is **opportunity, lack of incentive, personal motivation and financial constraints that hinder the conduct of research**. Bernardo’s (1997) study in the rationalization of research on higher education found out that although faculty members would love to do research, they do not have the luxury of time and support to do so. Notably, most of the researches in the Philippines are being done in the

colleges and universities as part of the requirements for the completion of the Master's degree and Doctorate in Education and other related disciplines. Admittedly, the teaching function of higher education is over-emphasized to the detriment, if not the neglect of the research function.

At present, the task of “re-engineering, re-inventing, and re-structuring the Philippine educational system” puts research in the forefront. This reason justifies why State Higher Education Institutions (SHEIs) are mandated by their charters to perform the triadic functions of instruction, research, and extension or community service including production. The Commission on Higher Education's (CHED) thrusts of quality and excellence, access and equity, relevance and responsiveness, as well as efficiency and effectiveness are seen or felt in the generation of new knowledge and the application of these generated ideas and information. State Higher Education Institutions play a crucial role in nation building. These education institutions of higher learning in the Philippines are perceived as the (1) fountainheads of great ideas, (2) the center of creativity and innovations, and (3) providers of solutions to the many problems besetting society. Since success begets success, achievement in research draws the attention and support of both government and donors.

What is Research capability?

How do we develop then, my friends, as members of the academe of higher education institutions the research capability of our faculty, so that in the long run a research culture would emerge, be enhanced and sustained?

Capability is having the competence or inclination to do something. Its Latin origin **capabilis**, meaning “able to hold” virtually defines what is possible to achieve and ultimately expresses how competitive, a researcher – both the initiate and the veteran, an institution, firm or industry is. By and large, research capability implies the vigorous presence of

infrastructures, equipment, manpower built up, research programs, and annual operational budget. For most experts, research capability of an institution also implies greater and more sophisticated level through well-equipped laboratories and facilities. Fetalver (2003) in his study indicated that research culture relates to research capability, output of research activities, research dissemination, and utilization of knowledge created and generated through research. For research to flourish, and to develop a research culture, it must be properly organized so that the individual members may interact with each other, communicate their results to other members, and get feedback on their work from other experts; hence the wisdom of having refereed journals.

Fostering the climate of research

- 1) **Research program** includes vision, mission, goals and objectives, resources, procedures, management, policies of the institution, directions, goals, and agenda for research. The research program, being the heart of the research endeavor, must be oriented to both long and short-range needs, and flexible. Realizing this, the formulated National Higher Education Research Agenda (NHERA) in 1998-2007, thus made research as the very core of higher education. The Commission on Higher Education (CHED, 1998) highlights the role of higher education in responding to the country's manpower and economic development needs, and emphasizes its role in developing "high level professionals who will search for new knowledge."

- 2) **Research structures, organization and management.** Research organization and management, as a complex system, largely depends on the harmonious relationship of the various components of the system to produce meaningful results. Ideally, it is open to experiences, change, interaction and interdependence between the scientists and the people with its environment. The bottom line of research management

lies in producing or delivering the expected outputs and creativity. Managing research activities and organization is inevitable for institution managers and leaders. They should provide a research setting, sound structures and the needed leadership, as modern research systems are asked to simultaneously produce outputs which satisfy scientific creativity and management productivity. Any research organization is influenced by the individual needs and goals of the knowledge producers (the researchers), therefore, the creation of a research office with full time head, members and staff could accelerate research consciousness as much as create dynamic research enterprise.

- 3) **Institutional vision and mission, goals and objectives.** The clarity of institutional purposes and objectives and the degree to which various constituencies understand them represents one index of institutional quality. The major index of an institution's quality is the astuteness with which it has defined its tasks and roles of the researchers, and the goal of the development of a research culture reflected in their statement of vision, mission. Vision and mission would indicate that the institution of higher learning is committed to the services of humanity and society through the practical use of the research outputs.
- 4) **Research policies, guidelines, agenda and priorities.** Pertinent to the provisions of Republic Act No. 7722 known as Higher education Act of 1994, the CHED (1996) rationalizes the availability of the Higher Education Development Fund (HEDF) vis-à-vis research projects by promulgating policies on research priorities and guidelines and/or procedures in the availability thereof. The CHED (1998) through the formulation of NHERA specifies the policy and guidelines on research agenda and research priorities that cover the management and administration of research, technical assistance programs

for research, and funding/financial assistance for research in higher education institutions. Higher education policies on research shall widely be disseminated (NHERA, 1998).

Higher education research must be guided by the following general policies and guidelines:

- Research is the ultimate expression of an individual's innovative and creative powers. For this reason, higher education institutions shall ensure that the academic environment nurtures and supports Filipino research talents.
- Research thrives in an environment characterized by free flow of information, honest and analytical exchange of ideas, and supportive administrative structures. Higher education policies shall enhance the individual's capacity to conduct independent and productive research.
- Research is one of the main functions of higher education institutions. Universities, in particular, are expected to lead in the conduct of technology-directed and innovative/creative researches which are locally responsive and globally competitive.

To Alcala (1997), the research guidelines are intended to: (a) *strengthen the research capacity of universities and selected professors to conduct research in areas of high priority;* (b) *encourage selected professors to conduct research in their areas of expertise;* (c) *promote publication of research papers in international journals, and in general, build a research culture.* The NHERA (1998) integrates the concerns of the higher education sector with the overall development goals and objectives of the country. The CHED (1998) was guided by the principles of prioritization: (a) *Multidisciplinary* which considers the researches that involve the expertise of researchers in several disciplines rather than single discipline;

(2) *Policy-oriented researches* are preferred over researches that have little or no policy implications across the various higher education disciplines; (3) *Operationalization of researches* aims to investigate and explain relationship of different phenomena; and (4) *Participation and broad impact researches* involve the involvement of as many stakeholders as possible to influence the greatest number of individuals or groups of individuals. As Bernardo (1989) aptly puts it, the existing policies of CHED have to be continuously reviewed and evaluated to determine the effectiveness of implementation. Policy studies and researches in higher education to be undertaken have to be geared toward generating empirical data for policy formulation and recommendation.

- 5) **Implementation procedures.** The need to advance in the understanding of the processes and implementing procedures associated with knowledge creation and diffusion becomes critical for policy-making and for management of research. In this regard, Gibson, et al (1997) suggest three main directions for research: (a) the development of a better conceptual understanding of the mechanisms that make knowledge relevant nowadays; (b) the construction of indicators associated with the immaterial aspects of the knowledge-based economy; and (c) the study of the opportunities and threats faced by developing nations.
- 6) **Research evaluation.** At the simplest level of research evaluation, one is concerned with whether the research presents a reasonable true picture of the situation under scrutiny. Fundamentally one assesses this by considering (1) whether the research process was likely to have dealt adequately with the area of concern; (2) whether the findings and the interpretation were likely to be biased or erroneous; and (3) whether the research was relevant to one's own organization (Oulton, 1995).

- 7) **Training in research.** Training in research is a frequently expressed need among research practitioners. For instance, even research conducted in other countries showed that just training in research would be an insufficient response. Wimbush (1999) argues that there is a need to develop a broader strategy which seeks to strengthen research capacity within the practice of research, rather than simply offering training to improve practitioners' research skills. This strategy will help improve the quality of research conducted and contribute to building an evidence base for utilization. A proposed broader professional development strategy for research utilizes a range of learning routes and delivery mechanisms. Hitchcock and Hinghes (1995) suggest, however, that the faculty or teachers must receive and be exposed to trainings to acquire skills and learn objectivity of doing research. They should be more familiar with the assumptions and methods of educational research for best products. Beduya (1999) reinforces such a stance when he mentions that conducting training on the technical aspects of research could accelerate research consciousness and create dynamic research enterprise.
- 8) **Research orientation.** The study of Chamberlain and Tang (1997) on attitudes towards research and teaching reveals that the respondent faculty members view themselves primarily as researchers and not as teachers. They value research for they believe that research offers them the greatest professional satisfaction.
- 9) **Leadership and management skills in research.** Success with the development of research activities needs leadership and management skills. Wolf (1990) in Rowey (1999) argues that strong, creative leadership is central in attaining academic and research excellence. The future of academic institutions depends on the development of effective leadership skills at all levels in the organization.

- 10) **Attitudes and personal interest in research.** Kasten (1984) notes that when the faculty must choose between rewarding a colleague with relative strength in research or teaching, they prefer to reward the former. The study of Chamberlain and Tang (1997) on attitudes towards research and teaching, reveals that people who engage in research freely pursue their interest and allocate their professional time to it. Interestingly, teaching does not interfere with research productivity.

- 11) **Funding of Research.** National funding for research is highly political and sensitive to pressures in society. To protect the interests, research must be sensitive to the needs and pressures within the society. They should take responsibility for educating the public about what they do. Funds are indispensable (CHED, 1998; Deza, 1999). Without funds, little or no research will get done. There are essentially four types of funding for research projects: (1) self-funding; (2) research carried out in the context of consultancy work; (3) obtaining specific funds under grant research and linking into existing major projects; (4) facilitating funding from various funding institutions. Securing internal and external funding could accelerate research development.

- 12) **Research Rewards, Incentives and Recognition.** Katz and Coleman (2001) claim that as research carried out by practitioners in educational institutions can be shown to have positive effects of many kinds. For the individual member of faculty, the effects of carrying out research may be related to reward structures within the institution. Organizations typically provide two types of rewards: extrinsic, e.g. salary and promotions; and intrinsic, that are associated with the actual process of work (Gibson et al. 1994 in Katz and Coleman, 2001). In the case of intrinsic rewards, benefits may be associated with the satisfaction arising from: completion, for example, of a research project; achievement of a personal

goal such as publishing a research paper or experiencing autonomy, and personal growth through work. Notably, rewards influence faculty performance, and their time and effort on research. To the faculty who are productive researchers rewards have more impact on research productivity. Beduya (1999) claimed that giving tuition deduction privilege to faculty who enroll in graduate studies and sending interested faculty researchers to regional, national and international conferences and fora could bring about research consciousness and interest.

- 13) **Linkaging and networking.** Today, networking within the academic community is important for a number of reasons. These include awareness of opportunities for collaboration or research funding. Essentially an individual process, networking is concerned with the creation of individual relationships. Research activities and publications can be at the core, but networking will also arise from, and lead to, editorial board membership, refereeing, research exchange, national and international travels (Rowey, 1999).
- 14) **Research output.** Research output refers to the research productivity of the institution, as indicated by a) quality of research such as published, presented, and unpublished researches; and b) quantity of research including those completed and ongoing researches, basic and applied researches, funded research projects, developed teaching and research materials, and new teaching techniques and strategies. Research output is also viewed as the power or ability to yield abundant results useful to society. Research output can thus be measured in terms of new knowledge unraveled and new technologies generated, tested and adapted to society (Banaag, 1994 in Deza).
- 15) **Research Dissemination.** Just to carry out a research output does not suffice. To obtain a return for the

investment it makes in research activity, the institution must have the research findings disseminated and implemented. There are two distinct phases in communicating research outputs: (1) preparation of the research report; (2) dissemination of the results through media-channels to the society. Getting research findings and results known to society is critical for utilization. Academics and practitioners have a duty to ensure that research dissemination takes place.

- 16) **Research utilization.** Relevant research has immediate utility, practicality and relationship to the real and everyday problems of society. The expectations of society for research to provide answers to questions tend to make field research more attractive than theory-oriented research. The importance of using research in education comes from the relevance of its outputs which can serve as inputs to teaching programs and various processes. The unused knowledge is useless knowledge. Society must benefit not only through greater knowledge but also from an improved capacity to do things. Research findings can be used to develop hypotheses as prelude to theory building. Certain factors are conducive to the utilization of research: 1) Structural factors deal with the organization of the client or user institution; 2) Process factors are concerned with the processes of research and research utilization; 3) Climate factors consider the positive attitudes and good relationships between people to facilitate the use of research; and 4) Outcome factors have something to do with reporting the results of research.

- 17) **Impact of research on teaching.** Research can provide evidence and argument as facts and proofs. It can help teachers identify, conceptualize problems, activities and outcomes related to teaching and learning. Scholarly research can also provide common language and theoretical frameworks useful for teachers to discuss and analyze. Research can provide data that can help describe

and monitor important educational concerns (e.g. demographic changes, dropout rates and comparisons of academic achievement), and research, to Gray 1998 (in Katz and Coleman, 2001), can provide means of inquiry for planning and decision-making, even when it is insufficient to provide the decisions themselves.

Building Research Culture: Sample Cases from Local Universities and Universities Abroad

Some local universities adopt a number of strategies, practices and activities to enhance their research culture:

De La Salle University, Manila was a subject of a case study on creating a research culture, as recently reported in the Asia-Pacific International Conference on Higher Education. It focused on DLSU's evolution from a teaching college to a research-oriented institution. This was meant to enhance the research standards of the university.

We may consider these feasible practices.

1. recruit faculty – bright MA holders who can be helped to obtain doctorates soon under the university sponsorship and those returning with Ph.Ds in the field the institution is developing
2. provide proper environment and conditions that will make these staying scholars and returning scholars productive
3. select promising people who can be sent for doctorates through faculty development program locally, supported by post doctoral work abroad for enrichment
4. maintain productivity through promotions not only in good teaching but research, and publications in refereed journals

5. provide incentives
 - 1) monetary for publication during the year and publication in international refereed journal
 - 2) travel grants for conferences abroad
 - 3) deloading
 - 4) outside grants stipends
6. provide “psychic” reward system – congratulatory letters, notices published in university newsletters, annual collection of publications, special prizes for outstanding publications, yearly recognition day, membership in “society of fellows”
7. have the right salary scale
8. build up endowments for graduate fellowship, research chairs, from outside contracts, alumni and funding agencies

At the Philippine Normal University, school year 2005-2006 is bannered as the “Research Year” in which efforts are more focused on faculty researches. So far, the following approaches/strategies have been put in place (to the delight of the faculty) to enhance the University’s research culture specifically in teacher education and education in general:

1. The University’s second commitment that of “Commitment to Knowledge Creation and Application” - expresses PNU’s desire to pursue research vigorously, along with the other 3 commitments – commitment to quality and excellence (academic), commitment to the culture of sharing and service (extension) and commitment to growth, efficiency and accountability (administrative)
2. The University’s creation of the Office of the Vice President for Planning, Research and Extension to oversee the research function of the University with the Center for Research and Development in

Education with a Director and full time faculty as its implementing arm.

3. The strengthening of the Research Council by including all the University Center Directors and the Campus Executive Directors as members
4. The designation of a Research Coordinator per College to supervise and coordinate the research activities of the different colleges
5. The development and adoption of the University Research Agenda for Teacher Education which cuts across dimensions of teacher education beneficiaries and stakeholders
6. The approval of the research incentives for faculty under BOR Resolution U-846 series of 2003 as to:
 - a) funding for professors who will present research paper in an international forum, conference, congress, seminar-workshops or similar such gatherings of scholars, researchers, academics and professors.
 - b) A plaque of recognition and a corresponding amount of no more than P30,000 for research reports published in international refereed journals.
 - c) A title of Professor Scientist and an award of P30,000 for professors who have finished four research studies in two consecutive years.
 - d) An amount of P20,000 for professors whose research or measurement on evaluation paradigm/ model/ theory is adopted, used or refereed to as main framework by a research agency/body or utilized by at least 10 practitioners.

7. The adoption of the policy (BOR Resolution #1029 s.2005) that faculty holding the rank of Professor I and up are required to do research with one release period per semester and encouraging all faculty to do the same with one release period per semester.
8. The granting of an annual “Best Research award” with the following prizes:
 - a. P100,000 – first prize
 - b. P75,000 – second prize
 - c. P50,000 – third prize
9. Once every semester the Annual Research Forum is held to disseminate faculty researches.
10. The publication of an annual research journal (*The Normal Lights*) and 6 research monographs per year by the Center for Research and Development in Education
11. The approval of the Graduate Research Fellowship (BOR Resolution #1031 s.2005) for graduate students

Other universities abroad such as the Central University of Technology, Edith Cowan University, the Department of Education and the Arts of the University of Queensland, Universiti Sains, Malaysia, to mention a few, had embarked on their own strategies to promote higher education research.

In building a research culture, the Central University of Technology (<http://www.cut.ac.za>), recommends the following:

- a) well-focused, goal oriented research
- b) committed researchers with sound training
- c) continuity of support, including mentorship

- d) an enabling environment that allows time to do serious research
- e) infrastructure support, including space, communication facilities and access to scientific literature
- f) research workshops/ seminars/ trainings

Comparatively, Edith Cowan University's Faculty of Business and Law has the following activities for funding to build a strong research culture for the year 2005:

- 1) visiting professors/ fellows
- 2) faculty based student scholarships (Ph.D, Masters, Honours)
- 3) staff development/ training in research related areas
- 4) conference attendance for research students/ staff who cannot support attendance
- 5) employment of research assistants
- 6) building research teams or networks
- 7) events to market research capabilities and encourage external support

By contrast, the research strategy of the Department of Education and the Arts of the University of Queensland for 2005-2007, to build a collaborative culture of rigorous inquiry informing evidence-based policy and practice, stipulates the following principles

- 1. **Currency** – setting and publishing agreed priority research topics that reflect new times and trends
- 2. **Comprehensiveness** - implementing a systematic approach to identifying appropriate evidence, critically appraising studies and documenting conclusions
- 3. **Collaboration** – building a research culture and a critical body of research in priority areas in

collaboration with the research community and funding agencies

4. **Communication** – improving access to dissemination and discussion of significant policy-related research findings to staff in central office, schools, government agencies, community
5. **Capital** – increasing investment on research through commissioned research, program evaluation and research infrastructure

Malaysia has reported in the Asia-Pacific Conference on Higher Ed. Research in Aug 2004 (Universiti Sains, Malaysia) some strategies to promote and enhance higher education research as follows:

1. **Mission, management and structure** – This includes mission statement of the university, creation of Research Creativity and Management Office and Office of Vice Chancellor for Academic and International Affairs
2. **Curriculum** – audit of curriculum; development of multi-cultural curriculum, presence of international scholars for international benchmarking
3. **Research** – inter-faculty research, review of research management, collaborative research institutes with international criteria, staff participating in international and national entrepreneurial research expositions
4. **Financial assistance** –
 - a) Vice Chancellor Award
 - b) Graduate Research Fund
 - c) Tuition waver
 - d) Graduate assistant scheme
5. **Academic staff** – endowments for establishment of professional chairs for research

Conclusion

In sum, the development of a viable research program put-into-practice and implemented by an institution contributes to the enhancement of a research culture. More importantly, the research program has to be made clear to the members of the faculty and administration. Similarly, educational background, research orientation, experiences, trainings, leadership skills in research, attitude and interest in research are significant factors for a wholesome research culture.

However, some reasons hinder the development of research particularly in State Higher Education Institutions (SHEI). To cite a few: 1) inadequacy and unavailability of local and foreign funding, 2) lack of research facilities, 3) publication, 4) library resources, 5) system of linkage and networks among others, that prevent the effective take off of research. Such setback calls for creative financing schemes to facilitate the acquisition of funds and other needs. Equally important is the administrator's research management roles.

In all cases, the published and presented research outputs are affected by the amount of research trainings and rewards provided by the institution. The constant exposure of the faculty and administrators to varied research trainings and their efforts in research that are rewarded and recognized would improve the research culture. Added to this is the importance of the availability of recent research journals for researchers.

On a personal note, one may add that the real test of any research endeavor lies in disseminating research findings through different media channels such as publication media, academic fora, worldwide web channels, and other means that lead to effective utilization of research findings.

Researchers are not born overnight, and track records in research are developed over the years. When planning a program, expect an interval of five years for full implementation and development. Institutional commitment must be supported not only by logistics but also by research orientation, leadership skills, experiences, patience, perseverance, trust, and judicious choice of faculty.

Indeed, research has gone a long way. All that we need is to develop it in some universities and enhance or sustain it in others. As an Australian Pro-Vice-Chancellor for Research puts it

“Research is at the heart of the modern University. In this information age, Central to its many roles are the conservation of knowledge developed by the human race to the present and the discovery of new knowledge. Through their research and scholarship, universities in today’s societies operate as key leaders. In turn, students are the keystones of such research as Universities reach for the future, while reflecting the past.”

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Edith Cowan University. (ECU) faculty of Business and Law.

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<http://www.norrag.org> (Network for Policy Research Review and Advise on Education and Training)

<http://64.233.187.104:education.qld.gov.au> (Department of Education and the Arts, Queensland)

Acknowledgment

Jesus A. Ochave, Ph.D.
Vice President for Planning, Research and Extension
Philippine Normal University

Lolita H. Nava, Ph.D.
Director, Center for Research and Development in Education
Philippine Normal University