# Understanding the Essence of Scholarship From the Lived Experiences of a Select Group of Outstanding Filipino Researchers

Allan B. de Guzman Emily B. Tan University of Santo Tomas

Capitalizing on the power of narrative-interpretive method in surfacing the essence and the multiple layers of meanings embedded in subjective realities, this qualitative study captured the lived experiences of a select group of outstanding university researchers who are active members of the National Research Council of the Philippines (NRCP). The long years of teaching and active research involvement of the eleven research participants facilitated the conduct of an in-depth narrative interview, which dwelt on their individual and collective research experiences and exposures. Interestingly, the use of cool and warm analyses helped emerged the essence of scholarship in the context of the lived experiences of the research participants. The emerged Motivation-Activity-Product (M-A-P) continuum in this study creates a panorama that would help the readers understand the driving, defining and deepening aspects of scholarship.

Key words: scholarship, Filipino researchers, M-A-P continuum

Correspondence concerning this article should be addressed to Allan B. de Guzman, Room 201 Thomas Aquinas Research Complex, España, Manila 1008 Philippines. E-mail: abdeguzman@mnl.ust.edu.ph (or ebtan@mnl.ust.edu.ph)

In research the horizon recedes as we advance...

Research is always incomplete.

Mark Pattison (1813–1884, in Peterson, 2004)

#### Introduction

The pivotal and transformative role of research in all aspects of human endeavor cannot be underestimated. Its power to transform organizational thinking and practice has long been recognized by all countries in the world. Through years, it has been consistently used by the academia in providing relevant and functional educational services. While schools, colleges and universities are expected to create a good balance in the three-fold functions of instruction, research and extension services, the domain of research remains unattractive to most of the professoriate. Efforts to intensify the place of research in the life of higher education institutions entail the elements of structure, culture and agents. Research structure encompasses the institutionalization of sound policy measures, financial and material allocation as well as physical resources needed to carry out scientific undertakings. Research culture assumes a common understanding, practice and engagement of all sectors in the school in programs, projects and activities geared toward knowledge creation, utilization and dissemination. Research agents refer to the presence and visibility of knowledge workers whose passion for truth is driven by well-developed and experience-based know-how. There is no doubt that the elements of structure, culture and agents define the overall success of any research engagement.

While previous studies across various disciplines have dwelt on aspects like institutional research culture (Brotherton, 1998; Katerndahl, Parchman, & Larme, 2002), infrastructure (Brotherton, 1998), attitudes (de Guzman, Olalia, Ong, Ordona, Pacheco, & Pelino, 2006; Ellis, 2005), motivation (Tien, 2000; Yining, Gupta, & Hoshower, 2006), mentoring program (Paul, Stein, Ottenbacher, & Liu, 2002), productivity and performance (Adkins & Budd, 2006; Dakik, Kaidbey, & Sabra, 2006; Hickson, Bodon, & Turner,

2004; Nazaroff, 2005; Pon, Carroll, & McGhee, 2004; Roy, Roberts, & Stewart, 2006), and utilization and transfer (Tsai, 2000), very few have attempted to capture the transition and development of faculty-researchers. This qualitative inquiry argues that the individual and collective experiences of university teachers as researchers are fertile grounds for discussion and debates and at the same time good sources of insights and reflections in understanding the dynamics and the language of research.

There is no doubt that the university is a community of scholars. As such, its goal is geared toward the enhancement of the personal and general growth of knowledge (Berman, 2000). The extent to which this growth of knowledge is achieved depends in great measure on the professoriate's degree of scholarship. By and large, the life of any university professor should be characterized by a high degree of scholarship, which according to Boyer (1990) covers discovery, integration, application and teaching. To encourage and develop productive scholarship, Brodin et al. (2002), Kennedy et al. (2003) and the Academy of Distinguished Teachers (2001) suggest that appropriate training, support and incentives such as promotion and rewards, be provided by universities to their faculty members. Some of these support include availability of funds, release time, chair's and dean's moral support for research, grant writing seminars and availability of statistical and computing help which are correlated with research productivity (Paul, Stein, Ottenbacker, & Liu, 2002). Support such as adequate space, facilities and resources also increase institutional research productivity (Brodin et al., 2002).

In developing countries like the Philippines, the development of a strong research infrastructure, culture and manpower is a question of priority and disposition. It is interesting to note that despite the existence of competing priorities in the school budget, differing values and value system among school administrators, too heavy teaching load and other professional engagements among higher education faculty, there are still a number of teachers whose productivity is not only gauged by their outstanding teaching performance but also by their research outputs and endeavors. Many of the

known seasoned productive Filipino researchers belong to the National Research Council of the Philippines (NRCP), which was established in 1933. This organization envisions itself to be a pool of highly trained scientists and researchers cohesively addressing the growing demands for knowledge, skills and innovations; sharing expertise with all sectors of society; effectively and efficiently contributing in making the Philippines one of the highly industrialized countries. It commits itself to promote and support problemoriented, basic, inter/multidisciplinary researches in all fields of science and the humanities, and to identify and provide solutions to issues and problems of government and Science and Technology concerns (NRCP Annual Report, 2004).

This qualitative study is an attempt to capture and understand the essence of scholarship from the individual and collective insights, musings, reflections and experiences of a select group of seasoned faculty researchers recruited from various institutions in the capital of the Philippines.

#### Research Method

## Subjects

Driven by the purpose of surfacing the essence of scholarship of faculty researchers whose transition and experiences cannot be easily understood by mere quantification or metric techniques, this investigation was carried out through the narrative-interpretive method of research. From a pool of forty-five researchers representing a scientific division of the NRCP, eleven were recruited to participate in an in-depth interview (van Maanen, 1992). Criteria for the selection include all of the following: (a) research awardees, either local, national or international; (b) faculty researchers with track record in research for at least ten years; (c) regular members of the Education Division of NRCP; and (d) availability and willingness of the research expert to be interviewed.

The subjects of the study were of ages fifty-seven to seventy-six years and mostly married. They are doctoral degree holders in the fields of

Education, particularly, English, Values Education, Psychology, Science Education, Mathematics or Mathematics Education, Health Education and Home Economics Education. They had taught for thirty-five to fifty-four years in five known universities in the Philippines. All attained the university professor or professor emeritus rank and had held top positions, such as University President, Vice-President, Vice-Chancellor, Dean, Director, Department Head and/or Chair of Standing Committee. Four of them retired from teaching and two retired from research activities as well. The research experiences of the subjects were from twenty to thirty-nine years. All, except two, were research achievement awardees of the NRCP. Others were awardees of other organizations.

All in their various professional statuses had engaged in scientific research only after they had gained some years of teaching experiences. They were active in professional research organizations, national and/or international.

#### Instrumentation and Data Collection Procedure

To capture the essence of the phenomenon under investigation, a two-layered approach to data gathering was employed. Preliminarily, personal data sheets called *robotfoto* were personally handed to the eleven participants, asking them to provide vital information regarding the personal and professional aspects of their career. The data sheets specifically sought for the participants' research background, achievements and contributions together with supporting documents. The information generated from this data gathering episode facilitated the development of the aide memoir which contains the key interview questions. Specifically, the following key questions were asked during the interview: (i) How do you describe yourself when you first started as a researcher? (ii) How was your research environment then? (iii) In what way have you overcome the challenges that research undertakings entail? (iv)What facilitated the development of your high degree of expertise in research? (v) In what way has research enhanced your professional life as a university faculty? (vi) What is the index of success of a faculty-researcher?

The second segment of the research comprised of the actual in-depth interview with the participants of the study. The interview was done based on their availability and in the place identified by them. Such practice was observed to ensure that a more natural and open atmosphere is created, thus, establishing better rapport and understanding between the participants and the researchers. Though there were key questions identified in the researcher's *aide memoir*, follow up questions were also raised to further probe into the participants' responses during the interview. Each interview lasted for about two hours and was tape-recorded with the consent of the participants.

#### Data Analysis

The tape-recorded interviews were individually transcribed to come up with an extended text. The extended text was subjected to phenomenological reduction via the construction of a repertory grid. This grid was constructed to enable the researchers to observe both cool and warm analyses. The cool analysis part consists of the identification of the significant statements or verbalizations of each respondent. These statements serve as basis in the conduct of the warm analysis stage where data categories were formulated and themes evolved. Reading and re-reading of the significant statements and the researchers' constant vigilance facilitated the surfacing of the essence of the phenomenon. The themes emerged in this study were further subjected to member checking procedure via correspondence technique (Lincoln & Guba, as cited in de Guzman & Guillermo, 2007) whereby each of the study participant was individually approached to verify the consistency of the transcription and interpretation. In this manner, the researchers were assured not only of the trustworthiness but also the truthfulness of the data reported.

## **Findings**

From the cool and warm analyses of the study, findings of this narrativeinterpretive inquiry have surfaced an interesting concept called the M-A-P continuum which describes the research motivation, activity and product of the eleven outstanding Filipino researchers and scholars, as seen in their individual and collective insights and experiences. Specifically, the MAP continuum, which is a derivative of both horizontal and vertical analyses of the significant statements and verbalizations of the eleven research participants, clearly describes how an individual researcher-scholar journeys in the realm of scholarship. Table 1 shows the summary of the said continuum.

Table 1 The Motivation-Activity-Product (MAP) Continuum of a Researcher-Scholar

Dimension	Level Characteristics		
Motivation	Brooding	Building	Blossoming
Activity	Learning	Leading	Linking
Product	Predisposition	Promotion	Passion

#### Motivation Dimension: The Driving Aspect of Scholarship

In this study, it is interesting to note that the road to research scholarship among the eleven participants took a long process. In fact, it was verbalized by all the participants that their first and formal encounter with scientific investigation was during their master's program while assuming either teaching or administrative tasks. Their comments were:

My first was my MA/MS thesis. I made adjustments to go through an entirely different activity. I read a lot and consulted people, whom I had to adjust to.

My desire to learn, improve teaching and acquire a graduate degree prompted me to complete my first research study. It was a sacrifice.

Research time and facilities were limited but desire for promotion and recognition prompted me to finish my thesis. I had to cope with the difficulties.

This collective experience that binds the participants together may be described as the *brooding level* where research skills and know-how were honed by both time and space. They were one in claiming that their prime motivation at that time was three-fold in nature. These include degree

completion, promotion and recognition. Through the years, the brooding nature of the participants' motivation was elevated to a state called building level where their research engagement was driven by their strong desire to achieve a high degree of credibility in their field of expertise as shown by the kind of their research undertakings. As one participant articulated, "I was highly motivated to work with professors who are seasoned researchers and authors of published articles in journals. They encouraged me to produce too." Another participant proudly said, "As an administrator, I worked on school problems and as an officer of a professional organization, I conducted a study to address its problems." Another one claimed, "I had pursued postdoctoral studies where I completed some researches. My readings and work shaped my areas of interest. I also did commissioned policy studies; and my desire to improve students' performance challenged me further to be competent in my field."

Additionally, the participants were also one in expressing their need to create a space where an exchange of information between them and other professionals in the field is made possible through research. As one of them shared, "I was happy when I felt that I was among the known researchers who asked me questions of how and what in relation to my study." Another participant responded, "We critiqued our research outputs and freely give suggestions during professional organization meetings. Another one added, "I had the opportunity to communicate about research with research experts through the internet." The blossoming level was achieved by the participants when their efforts in the conduct of research were directed toward instructional improvement, community development and empowerment and societal transformation. One participant shared, "It is very nice to see that our researches are being used by students in their pursuit of knowledge and in their own researches. Some of the books I wrote contain the results of my researches." Another one said, "I contributed to standardized testing of values." Two others shared, "We introduced some innovative teaching strategies, and researched on teacher and school effectiveness, and curriculum development." Though quite extrinsic, the participants considered

being cited as reference as an index of success and fulfillment in this level of research expertise. They said, "It is rewarding to be cited for it ensures that research outputs contribute to the frontiers of knowledge."

While a strong motivation for research permeated the journey of the participants across various levels, it should be noted, however, that they, too, had experienced both roadmaps and roadblocks, which facilitated and challenged their set goals and aspirations. On one hand, their research roadblocks were contextual and structural in nature. The lack of research funds, poor access to available research materials and equipment, inadequate manpower, and limited trainings were crucial in the completion of a research undertaking, not to mention the need for some participants to attend to some personal and domestic concerns. Some of their complaints were: "Many times I had to spend much when gathering data. Fund for research is rarely provided by the school." "There was lack of published reading materials in some fields. Research writing entails concentration for long hours." "There was little assistance provided by my mentor and limited training provided by the school; I coped by reading a lot on research methods and published studies." On the other hand, the roadmap to research completion, as seen in the sharing of the participants, was attitudinal in nature. Some of the remarks were: "It was my keenness to time and desire for more up-to-date information that led me to success and I make sure that I use articles published by high-impact journals." "I integrate my outputs to curricular content and my success in research is due to hardwork, patience and commitment. Notably, the participants' strong sense of altruism, quality consciousness, time management skills, commitment and perseverance, sense of innovativeness, and passion to learn were the enabling elements that fired them within through the years.

## Activity Dimension: The Defining Aspect of Scholarship

The extent to which high degree of scholarship is achieved depends in great measure on the nature of the scholar's activity engagement. As shown in the

study, the participants' professional activities and undertakings were all bounded by learning, leading and linking. The learning aspect of their scholarship as researchers was realized by their continuous participation in educational forums, professional readings and interacting with the experts in the field. As one of the most interesting participants articulated: "By reading books and attending seminars... and then of course when I was given a study grant with study leave. I was updated through my doctoral study. I was able to get funding for research. I joined a group of researchers and even became the chairman of the research committee of a professional organization." Another participant commented, "If you are not sure of doing something, look for references and consult other experts. Be open to people's comments on your work. Another participant added: "By keeping abreast with trends and development in research, attending meetings with researchers, and joining colleagues in conducting research, especially when funded, ensure my scientific rigor for research."

The learning aspect of the participants' professional activity enabled them to enter the realm of *leading*, a characteristic of scholars whose professional engagement is marked by their visibility in conferences as presenters, publication of outputs in highly recognized and reputable scientific journals in their field, membership in professional research organizations, and participation in advanced trainings like post-doctoral fellowship and studies. Finally, the *linking* aspect of scholarship was made evident by the participants through their contributions as research evaluators and consultants to individuals, institutions and the community at large. The following verbalizations support the linking aspect of the participants' scholarship:

Many of my research involvement were done with recognized institutions. I was not cited as an author or a co-author. However, they cited ISMED, a research office, where I belonged. I contributed to policy formulation, for example, the research with MOA between ABS-CBN and me for VHS Video episode viewing in schools. I gained the esteem of other researchers because my studies were down to earth... Despite my being active in applied research, I had never lost touch with the academe.

I developed some kind of congenial relationship with my target client because they felt they were important, boosting their self esteem. They were motivated to be one of the most important people in society... On my part, I felt that I gained the esteem of the seasoned researchers when they recognized me as one of them. They showed interest in my work when they asked me a lot of questions.

### Product Dimension: The Deepening Aspect of Scholarship

Interestingly, the deepening aspect of scholarship was seen in the participants' realized products of their research engagement. More than the material rewards and perks that come along one's research undertaking are the participants' predisposition, promotion and passion. Predisposition as a by-product of scholarship encompasses the development of a belief system that all research effort is not an exercise in futility. As one participant said "I discussed my research in class and invited my students to comment, for them to become critical. I discussed results with my friends to get their perspectives. I shared also results in fora/conferences and in research journals." The promotion aspect of a scholar's product is best realized in the manner by which outputs are disseminated, communicated and utilized by the target community as shown in the following verbalizations:

I voluntarily set aside my time, I was not forced; I secluded myself. I set my mind that by the weekend I had to finish whatever I had to submit to the publisher. I shared the results of my researches through presentations in conferences and other fora, and publications.

You should see a vision that someday your research can be of use. Someday, your children and others also would be able to share the glory that you have attained. Results are shared by presenting them in lecture for and through publications. Some institutions like the Library of Congress, Washington, D.C., pick up some publications, like mine.

It is worth mentioning that by and large, efforts done by the participants in the improvement of science and mathematics education, materials preparation for literacy development, value development index standardization, non-formal education, school effectiveness and innovation

contributed much in the advancement of knowledge frontiers and the improvement of quality of life in the country.

More importantly, in this study, the participants' verbalizations, musings and sharing helped surface the idea that true scholarship is fueled by an intangible and powerful spirit called *passion*. This passion is said to be driven by commitment and illumined by experiences and openness to possibilities. Interestingly, all the participants were one in expressing their strong desire to continue researching and mentoring people through discipleship even after retirement.

#### Discussion

The power of qualitative approach in research is indeed a valuable lens in surfacing the multiple layers of meaning embedded in human phenomena. Scholarship, as the language of the professoriate, calls for a collective interpretation and re-interpretation. In this study, it is interesting to note that the apodictic nature of scholarship was revealed from the lens of the lived experiences of university faculty whose commitment to the life of the mind was made possible through research. While it is true that the development of one's research expertise is brought about by a dynamic interplay between nature and nurture, the individual and collective research experiences of the participants in this study situated the aspect of one's research scholarship along a continuum. The emerged Motivation-Activity-Product continuum in this study creates a panorama that would help the readers understand the transition and development of a researcher-scholar through the years.

As shown in the study, the motivational dimension of a researcherscholar commences with a kind of drive to achieve degree completion, recognition and promotion, which in general, are extrinsic in nature. Similarly, Brewer and Brewer (1990) averred that the non-monetary rewards and recognition were viewed as the least important factors in motivating faculty to engage in research. In a study conducted by Kfir et al. (1997, cited in Shamai & Kfir, 2002), it was found that teacher engagement in research is toward master's degrees and doctorates, or concerns a second job, but has nothing to do with teacher's work at the college or his professional practice. This general utilitarian tendency of beginning researcher-scholars to aspire for personal-driven rewards may be considered as a form of investment for purposes of achieving a sense of identity and satisfaction. This tendency, according to Hu and Gill (2000), is labeled as pretenure research productivity.

Notably, as one gains more experience and exposure in the field, a shift in motivation becomes more evident. As seen in this study, the participants were driven by a kind of desire geared toward credibility building so that a sense of belongingness is better felt and experienced. This belongingness in the realm of research is made evident by the kind of support that one receives from other researchers in the same field. In a more concrete sense, such credibility is measured through citation reports and the researchers' ability to establish network and linkages within their spheres of interest. Pitkethly and Sullivan (2003), for their part, averred that the supportive environment within the network facilitates the development of confidence among researchers in their research capabilities. Consequently, faculty members' confidence in their research abilities is related to their research productivity (Kotrlik, Bartlett, Higgins, & Williams, 2002).

Interestingly, as the researcher-scholars mature in their endeavor, a more intense and altruistic drive emerges as the researchers' motivation is geared toward contributing significantly in the improvement of thinking and practice in their fields in particular, and the society, in general. This movement in the motivation of a researcher has been described by Hu and Gill (2000) as post-tenure productivity, where research efforts and undertakings are directed toward consumption. Additionally, the study of Harman (2005) disclosed that research is primarily driven by intrinsic interest and to generate inputs to teaching, rather than by utilitarian motives.

Across the foregoing motivational levels, it is worthy to note that the researchers were also confronted by both roadmaps and roadblocks to

research. Considering that all the participants in this study are all women, it is surprising to note that institutional and personal variables never affected their growing interest for research undertakings. This finding runs parallel with what Sax, Hagedorn, Arredondo, and Dicrisi (2002) found in their research indicating that family-related factors do not interfere with scholarly productivity. In a similar vein, Paul, Stein, Ottenbacher, and Liu (2002) stated that a low to moderate positive correlation exists between faculty research productivity and a number of institutional support factors which include availability of funds, release time, chair and dean support and availability of statistical and computing helps, among others.

The defining aspect of scholarship in this study is characterized by the elements of learning, leading and linking. A beginning researcher-scholar, as gleaned from the study, engages himself/herself in various activities intended to widen and deepen his/her knowledge and understanding of the dynamics of research. This kind of engagement indicates that a strong commitment for learning is one hallmark of a true scholar. This commitment for learning prevents a scholar to suffer from obsolescence in and disconnection with his field. Various opportunities such as professional readings, participation and interaction with other scholars render a researcher as perennial learner whose growth and development is rooted on a high degree of openness. Brodin et al. (2002) posit that "it is important for staff to have opportunities to train throughout their careers, which may span 30 years or more" (p. 99).

The leading and linking aspects of scholarship entail visibility and productivity. Today, more than ever, the need for and the power of research collaboration, participation in research conferences, membership in professional association and most importantly, publication in high-impact and reputable journals cannot be underestimated. On one hand, establishing an open system of communication and interaction with other scholars in the field widens one's research horizons. As network is established nationally and internationally with more experienced colleagues, a better research experience is gained (Pitkethly & Sullivan, 2003), research relevance is

achieved, new ideas are generated (Richardson & Cooper, 2003), an improved research capacity is built (North American Primary Care Research Group Committee, 2002; Svab, 2004), an improved institutional image is achieved (Teodorescu, 2000), and a truly global scientific culture is fostered (Harris, 2002). There is no doubt that teamwork, collaboration and interdisciplinarity are some of the principal characteristics of modern science (Rey-Rocha, Martin-Sempere, & Garzon, 2002). Participation in domestic and international conferences, on the other hand, may increase research productivity of faculty members (Teodorescu, 2000).

While faculty research activities involve both consumption and production, most studies and faculty view it from the perspective of production (Demski & Zimmerman, 2000). Publication and dissemination of research outputs have been recognized as important elements in building research capacity (North American Primary Care Research Group Committee, 2002), skills (Lacanilao, 1998), productivity (Kotrlik, Bartlett, Higgins, & Williams, 2002), and institutional visibility and prestige (Im, Kim, & Kim, 1998).

Notably, a researcher scholar's identity, visibility and credibility serve as inspiration and benchmark for budding researchers in the field. As Levine (1997, cited in Kotrlik, Bartlett, Higgins, & Williams, 2002) puts it:

Faculty members with long standing success or integrity in research are often admired by other faculty and students as being on the cutting edge of their field and are regarded as knowledgeable about most issues in their field. These faculty members are seen as more powerful educators and often serve as frame of reference for junior faculty members or others who are developing their own research agenda.

The truism of the adage "there is a pot of gold at the end of the rainbow" was very much incarnated in the research journey of the study participants. As Fogarty (2003) stated "being a scholar produces immense psychic rewards that are as strong as those found in teaching or administration" (p. 22). More than the investment factors of extrinsic rewards, the participants in this study were more driven by the consumption factors or intrinsic rewards

of research engagement (Yining et al., 2006). Interestingly, predisposition, promotion and passion as by-products of their commitment to scholarly endeavors have developed in them a genuine belief in their capacity and their commitment to transferring their know-how and expertise through continuous research mentoring, networking and publication. True enough, the pinnacle of one's research engagement is reached when the faculty begins operating in a context where the language of mentoring is skills transfer. Mentoring is considered to be a stage of career development (Yang & Elliot, 1999). Mentoring or discipleship is a key variable in ensuring research program continuity, increasing faculty productivity and enhancing the mentor's skills in teaching, research and extension service. The symbiotic relationship between the mentor and mentee brings about mutual growth in research competence and confidence and at the same time creates a common language between the faculty and the students. Mentoring is one of the most important skills for faculty because it affects both research productivity and the quality of training for undergraduate students, graduate students and postdoctoral researchers (Pfund, Pribbenow, Branchaw, Lauffer, & Handelsman, 2006).

#### Conclusion

While the essence of scholarship may be viewed and interpreted from a positivist perspective, the power of qualitative approach to research cannot be underestimated. Its power to provide layers of meanings and essences is gaining grounds not only in the soft sciences but hard sciences as well. Undoubtedly, the use of narrative interpretive method is indeed a valuable tool in creating a spectrum of meanings geared toward understanding and appreciation of how scholarship among the professoriate unfolds. From the sharing and verbalizations made by the participants, it was found that a researcher-scholar journey in the realm of scholarship is better appreciated from the context of their motivation, activity or involvement and products realized. Indeed, the M-A-P continuum in this study can serve as an

interesting lens and a powerful rudder in investigating various aspects of scholarship across disciplines and in capturing the essences of the lived experiences of university faculty.

Though academe has traditionally struggled with the question of proper balance of emphasis between teaching and research (Hotard, Tanner, & Totaro, 2004), it is interesting to note that scholarship remains as the language of university professorship. The panorama of scholarship depicted from the lived experiences of a select group of outstanding researchers in the Philippines invites the need to create a more fertile, longitudinal, and cross-sectional research grounds and agenda where the multifaceted and less investigated features of the life, journey and trajectory of researcher-scholars are captured not by numerical entities but by a more eidetic description of subjective realities. In the final analysis, the individual and collective experiences of researcher-scholars can expectedly form a more empirically grounded database of the many faces, paces and phases behind the key players in the dynamic stage called *scholarship*.

#### References

- Academy of Distinguished Teachers (2001). Retrieved July 12, 2004, from http://tc.unl.edu/cansorge/academy/whitePaperPages/impactTechnology.html.
- Adkins, D., & Budd, J. (2006). Scholarly productivity of U.S. LIS faculty. *Library and Information Science Research*, 28(3), 374–389.
- Berman, H. J. (2000, December). Reconsidering scholarship reconsidered. Paper presented at the Annual Meeting of Council of Graduate Schools, New Orleans, LA. Retrieved May 24, 2007, from http://www.uis.edu/academicaffairs/FAculty%20Development/Scholarship/Schol1%20Speech%20CGS%202000. pdf
- Boyer, E. L. (1990). Scholarship reconsidered: Priorities of the professoriate. San Francisco: Jossey-Bass.
- Brewer, P. D., & Brewer, V. L. (1990). Promoting research productivity in colleges of business. *Journal of Education*, 66 (1), 52–56.

- Brodin, P., Bennett, I., Appleton, J., Bonta, Y., Feher, E., Latta, M., & O'Connell, B. (2002). Ensuring research productivity in the future faculty. European Journal of Dental Education, 6(83), 97-107.
- Brotherton, B. (1998). Developing a culture and infrastructure to support researchrelated activity in further education institutions: A knowledge-based organization perspective. *Research in Post-Compulsory Education*, 3(3), 311–328.
- Dakik, H. A., Kaidbey, H., & Sabra, R. (2006). Research productivity of the medical faculty at the American University of Beirut. *Postgraduate Medical Journal*, 82(6), 462-464.
- de Guzman, A. B., & Guillermo, Sr., M. L. (2007). The serendipity of principalship: Meaning-making of a Filipino secondary school principal. *Asia Pacific Education Review*, 8(2), 1–9.
- de Guzman, A. B., Olalia, C. J. C., Ong, M. I. F., Ordona, S. M. N., Pacheco, M. C., & Pelino, M. S. O. (2006). Research psychographics of the nurse professoriate in a Philippine comprehensive university. *Asia Pacific Education Review*, 7(1), 62–75.
- Demski, J. S., & Zimmerman, J. L. (2000). On "research vs. teaching": A long-term perspective. Accounting Horizons, 14(3), 343–352.
- Ellis, M. (2005). Establishing a research culture for archive administration in the UK. *Education for Information*, 23(1/2), 91–101.
- Fogarty, T. (2003). Maintaining research productivity while chairing. The Department Chair, 14 (2), 22.
- Harman, G. (2005). Australian social scientists and transition to a more commercial university environment. Higher Education Research and Development, 24(1), 79-94.
- Harris, E. (2002, April). Towards a globally responsible and sustainable scientific culture. Paper delivered during the 27th Annual AAAS Colloquium on Science and Technology Policy, Washington, DC.
- Hickson, III, M., Bodon, J., & Turner, J. (2004). Research Productivity in Communication: An Analysis, 1915–2001. Communication Quarterly, 52(4), 323–333.
- Hotard, D., Tanner, J., & Totaro, M.W. (2004). Differing faculty perceptions of research and teaching emphasis. *Educational Research Quarterly*, 27(4), 9-22.
- Hu, Q., & Gill, T. G. (2000). IS faculty research productivity: Influential factors and implications. *Information Resources Management Journal*, 13(2), 15-25.

- Im, K. S., Kim, K. Y., & Kim, J. S. (1998). A response to assessing research productivity: Important but neglected considerations. *Decision Line*, 29(3), 18-22.
- Katerndahl, D. A., Parchman, M., & Larme, A. C. (2002). Cultural revolution: Developing a research culture in family medicine. *Family Medicine*, 34(8), 616-618.
- Kennedy, R. H., Gubbins, P. O., Luer, M., Reddy, I., & Light, K. E. (2003). Developing and sustaining a culture of scholarship. *American Journal of Pharmaceutical Education*. Retrieved July 24, 2005, from http://www.ajpe.org/view.asp?art=aj670392&pdf=yes
- Kotrlik, J. W., Bartlett II, J., Higgins, C., & Williams, H. (2002). Factors associated with research productivity of agricultural education faculty. *Journal of Agricultural Education*, 43(3), 1-10.
- Lacanilao, F. (1998). How to improve research and development capability. University of the Philippines Faculty Conference Report, 49,142–149.
- Lincoln, Y. S., & Guba, E. G. (1985). *Naturalistic inquiry*. Newbury Park, CA: Sage Publications.
- National Research Council of the Philippines [NRCP]. (2004). *Annual Report*. Philippines: Scientific Documentation and Information Division.
- Nazaroff, W.W. (2005). Measuring research productivity. Indoor Air, 15(6), 382.
- North American Primary Care Research Group Committee. (2002). What does it mean to build research capacity? *Family Medicine*, 34(9), 678–684.
- Paul, S., Stein, F., Ottenbacher, K., & Liu, Y. (2002). The role of mentoring on research productivity among occupational therapy. *Occupational Therapy International*, 9(1), 24–40.
- Peterson, R. A. (2004). Thoughts on the Future, Part II. Research News, 16(2), 1-2.
- Pfund, C., Pribbenow, C. M., Branchaw, J., Lauffer, S. M., & Handelsman, J. (2006). The merits of training mentors. *Science*, 311(5760), 473–474.
- Pitkethly, M., & Sullivan, F. (2003). Four years of TayRen, a primary care research and development network. *Primary Health Care Research and Development*, 4(4), 279–283.
- Pon, J.-A., Carroll, S. C., & McGhee, C. N. J. (2004). Analysis of New Zealand's research productivity in ophthalmology and vision science: 1993–2002. *Clinical and Experimental Ophthalmology*, 32(6), 607–613.
- Rey-Rocha, J., Martin-Sempere, M. J., & Garzon, B. (2002). Research productivity

- of scientists in consolidated vs. non consolidated teams: The case of Spanish university geologists. *Scientometrics*, 55(1), 137–156.
- Richardson, B., & Cooper, N. (2003). Developing a virtual interdisciplinary research community in higher education. *Journal of Interprofessional Care*, 17(2), 173–182.
- Roy, K. M., Roberts, M. C., & Stewart, P. K. (2006). Research productivity and academic lineage in clinical psychology: Who is training the faculty to do research? *Journal of Clinical Psychology*, 62(7), 893–905.
- Sax, L. J., Hagedorn, L., Arredondo, M., & Dicrisi III, F. (2002). Faculty research productivity: Exploring the role of gender and family-related factors. *Research* in *Higher Education*, 43(4), 423–446.
- Shamai, S., & Kfir, D. (2002). Research activity and research culture in academic teachers' colleges in Israel. *Teaching in Higher Education*, 7(4), 397–410.
- Svab, I. (2004). Changing research culture. Annals of Family Medicine, 2(2), 530-534.
- Teodorescu, D. (2000). Correlates of faculty publication productivity: A cross-national analysis. *Higher Education*, 39(1), 201–222.
- Tien, F. F. (2000). To what degree does the desire for promotion motivate faculty to perform research? *Research in Higher Education*, 41 (6), 723–752.
- Tsai, S. (2000). Nurses' participation and utilization of research in the Republic of China. *International Journal of Nursing Studies*, 37(1), 435–444.
- van Maanen, M. (1992). Researching lived experiences. London: Althouse Press.
- Yang, J., & Elliot, G. (1999). Socialization and leadership on the socialization of beginning physical education teacher educators. Research Quarterly for Exercise and Sport, 64, 188–201
- Yining, C., Gupta, A., & Hoshower, L. (2006). Factors that motivate business faculty to conduct research: An expectancy theory analysis. *Journal of Education for Business*, 81(4), 179–189.